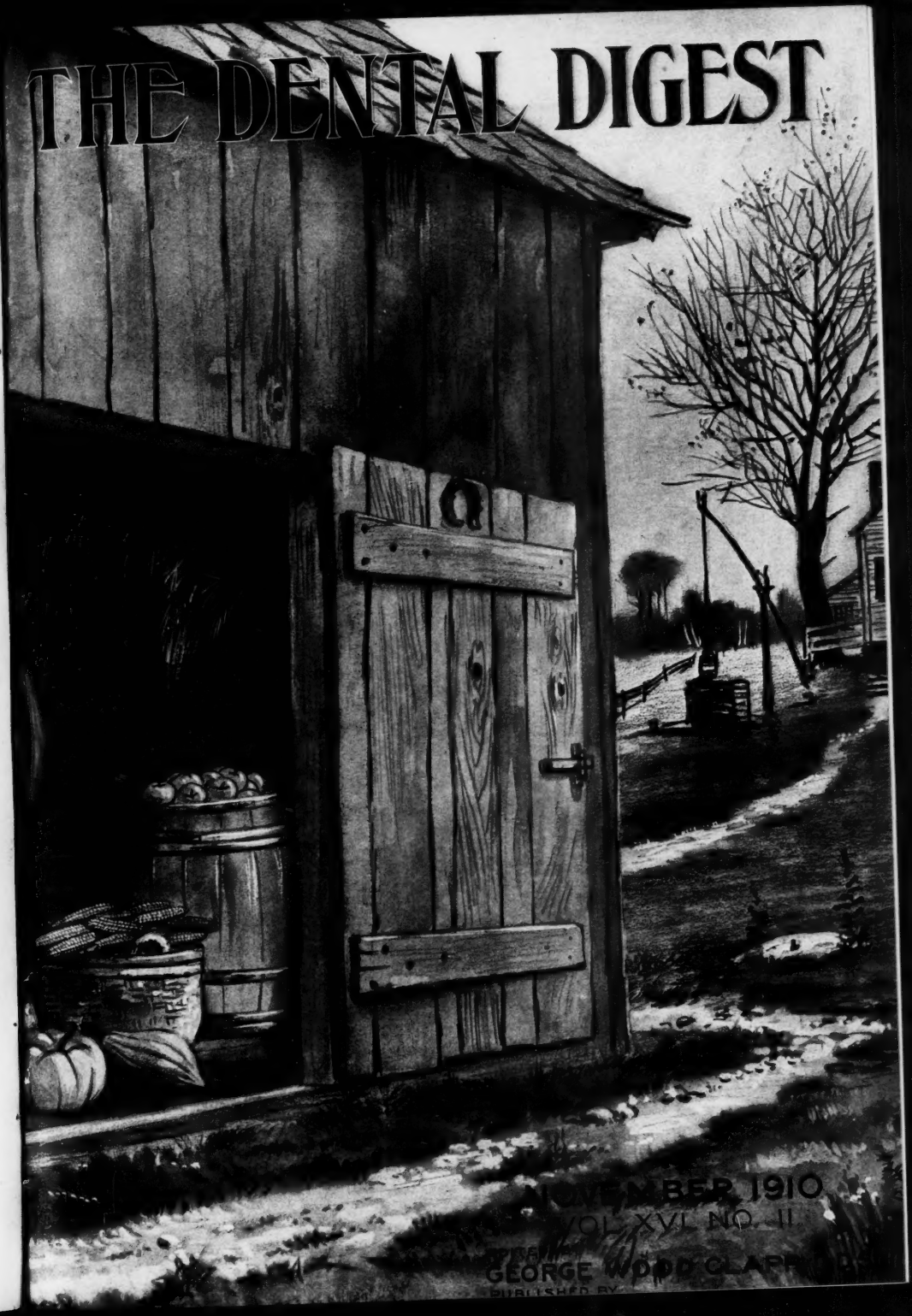
THE DENTAL DIGEST
NOVEMBER 1910
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GEORGE WOOD CLAPP
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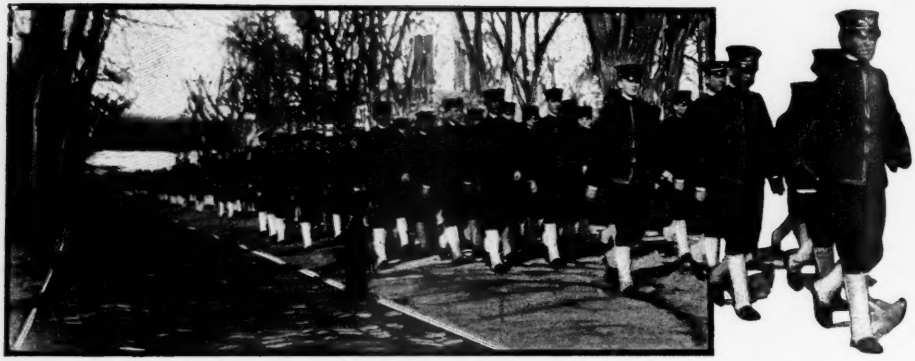

EXPLAIN to your patients the necessity of regularly brushing the teeth, but talk to them in a way which is easily understood. As Dr. Richard Grady, the dentist of the Annapolis Naval Academy, says—

"Tooth-brush drill is as needful as any gymnastic exercise for the preservation of health."

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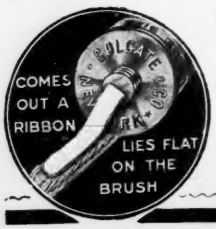

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THE DENTAL DIGEST

GEORGE WOOD CLAPP, D.D.S., Editor

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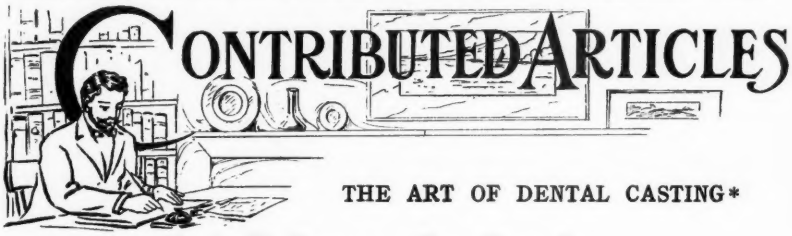


THE ART OF DENTAL CASTING*

BY L. W. STRYCKER, NEW YORK CITY

LET us give up theory and academic discussion and settle down to what we know to be practical. Let us start from the first important step in the process of securing a perfect casting and carry on our study in the light of facts obtained by actual experience. In the discussion of methods, appliances and supplies, names and credit or discredit will be freely mentioned. "Partiality toward none" will be the writers' motto.

Several subjects directly related to the casting process will be taken up in the following order:

Investments.
Waxes.
Investing.
Heating.
Casting.

With each article, an effort will also be made to show by text and illustrations some practical application of the casting process to the needs of practice.

No doubt, many times upon entering your laboratory, with a delicate wax model in hand, preparatory to casting an inlay, your gaze has wandered to the numerous cans and boxes of investment material on the shelves, and you have asked yourself, "What investment shall I use?"

Have you ever given this question of investments much serious thought? Probably not. You have doubtless taken this man's opinion and that man's advice, buying can after can of the different investments, only to condemn one after the other, simply because you have not been working along the right lines.

The writer, while traveling through Pennsylvania a short time ago, noticed a sign at a railroad crossing which read, "Stop! Look and Listen." If you would be successful in casting, and will use as much caution in following detailed manipulation as is suggested by that sign, you will have few failures.

Now let us see what constitutes a perfect investment compound. There are six requirements which an investment compound must fulfil before it can be called even approximately perfect. They are:

1. It should, when heated to 1200 or 1300 degrees Fahrenheit, expand enough to compensate for the shrinkage of the gold when cast.
2. It should be hard enough when set to permit removing the sprue-wire and crucible without any danger of disturbing the mould.
3. It should set within a reasonable time, but not so quickly as to hinder manipulation; and it should lose its moisture by evaporation without creating disturbances that tend to distort the model.
4. It should be hard enough, when heated, to withstand the pressure of the gold when forced into the mould.
5. It should be infusible, so there will be no danger of the molten metal fusing it when casting.
6. It should be fine enough to make a smooth casting, and porous enough to permit the operator to eliminate the air entombed or compressed.

Read the above very carefully and mentally DIGEST each of those requirements. They are not one man's idea only, but are the results of the combined efforts of many earnest, capable workers, and are based on practical facts obtained only through the expenditure of much labor and money in experimenting and in chemical analysis.

Forget the everlasting business of guessing. Do not attempt to make

your own investment, or expect to obtain good results by using formulas published on the subject, unless you know absolutely the quality of each of the ingredients used and unless you seriously intend taking up the study of investments and are prepared to spend a great deal of time and money thereon. As illustrations of the incompleteness or inaccuracy of much literature on the subject of investments, consider Magnesium Oxid, Talcum (Magnesium Silicate), Calcined Fire-clay, Powdered Fire-brick, Chalk, Whiting, Portland Cement, which, with many other materials, have been advocated by dentists and others as satisfactory investment materials. If the advocates of these materials were to examine carefully the chemical constitution of these several materials, they would learn that not one of them expands at the temperature used during the process of casting. Then again, the plaster of Paris used to-day for dental purposes is either ground too fine for investments, or it is doped in order to make it set quickly or slowly as the case may be. It expands until set and dried out, then contracts when heated. This expanding characteristic is the cause of many failures in fitting of dentures through the use of green impressions and models.

As for clays, the authority on clay says " There are no pure clays; " the coloring matter is iron.

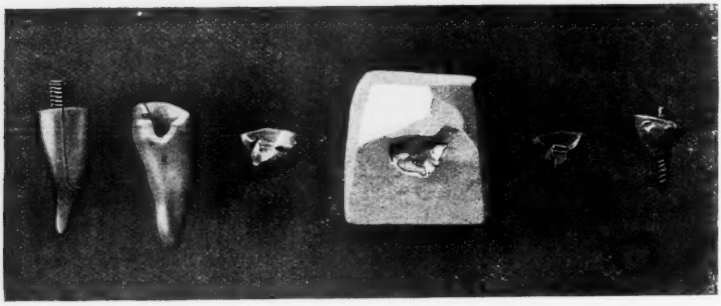
Then take silica; how many grades are there and what do they contain? Iron, one of the ingredients, insures disaster when silica is used in making investments.

The manufacturers of investments are at fault, in as much as they do not give the initial ingredients of the investments enough thought and study in their manufacture.

Let the manufacturers of investments do the thinking and spend the money and you carry out the following little experiment for your own satisfaction, and note results.

Send a postal to each of the various manufacturers and secure a sample of each investment. Prepare a number of brass rings by cutting a piece of brass seamless tubing, about twice the circumference of a wedding ring, into exactly equal lengths so as to give the investment in each an even show. Fill each ring with a different investment material, using the samples you have received from the different manufacturers, being *particularly careful to follow the directions received with each.* If you have no graduate in which to measure the water, use a tablespoon; if you have no scale on which to weigh the investment, use a given measure of some sort. Do not use any guesswork in your experiments, for if you do they are pretty sure to be failures. Keep a correct record of all you do during your experimenting, that you may always

have these notes to which to refer. Make a note of the time it takes for each investment to set. Now you are ready to heat the cases; they must all be heated at one time, under the same conditions; heat to a red



1 2 3 4 5

Ill. No. 1.—Root by stress applied by crown. Ill. No. 2.—Similar fracture, showing root and piece. Ill. No. 3.—Impression of piece broken from root. Ill. No. 4.—Wax model of piece of root. Ill. No. 5.—Casting made from wax model soldered to crown post.

6 7

Ill. No. 6.—Post with casting soldered to it, in place in root. Ill. No. 7.—Crown mounted on restored root.

heat or from 1200 to 1300 degrees Fahrenheit; watch them closely and test for hardness, etc.

The following table, with the above experiment will be about the results you will obtain:

(In the following table the investment materials are entered in the first column in the order of setting, the quickest setting first, the slowest last. In the second column Standard is placed first as being first in

order of hardness or hardest when set and before heating. In the Expansion column, Caulk's is placed first as expanding most.)

	Time in Setting	Hardness When Set	Manipulation	Hardness After Heating	Porosity	Expansion
1st...	Terra plastica	Standard	Standard	Standard	Standard	Caulk's
2d ...	Consolidated	The other investments rank in one class	Caulk	Terra plastica	Terra plastica	Pelton & Crane
3d ..	Standard		Pelton & Crane	The others rank in one class	The others rank in one class	I. D. L.
4th ..	S. S. White		I. D. L.			Consolidated
5th ..	I D. L.		S. S. White			S. S. White
6th ..	Pelton & Crane		Consolidated			Standard
7th ..	Caulk		Terra plastica			Terra plastica

How these results compare with the requirements of a perfect investment will be outlined in our next article.

But in order that we may have something practical to use between now and then, let us close with a description of a method by which Dr. C. F. C. Mehlig, of New York, has successfully preserved several roots which have been extensively fractured.

Restoration in these cases would have been very difficult without the aid of the casting process, as the fractures extended far down the roots. Illustration No. 1 gives an idea of such fractures. The fracture in this case is not greater than the writer has seen in practical cases. The method of procedure is as follows:

After removing the fractured portion of the root, attach a handle to the outside with sticky wax, as shown in Illustration No. 2. With a small quantity of Alboline liquid vaseline oil the inner surface of root. Make an index or impression of good impression plaster, as shown in Illustration No. 3; the finer the plaster the better, but make it *thick*, so it will not break in removing the tooth-pattern. When set hard, remove with care the piece of root from the plaster index; then soak the impression in water until thoroughly saturated; melt a little inlay wax in a spoon spatula and pour into the plaster mould; model it as you see fit; remove the wax pattern with sprue-wire, as in Illustration No. 4, and compare with tooth-pattern. If found perfect, invest and cast. When cast, remove the cast sprue first from the casting. Compare the casting with the piece of tooth which broke and was used as a tooth-pattern and remove any imperfections. Fit into the tooth as in Illustration No. 6, and insert the crown post in root. Wax the post to the inlay while in the mouth; remove both post and casting, invest both and solder the post to inlay, Illustration No. 5. When finished, they will appear as in Illustration No. 7.

(To be continued.)

THE MECHANICAL SIDE OF ANATOMICAL ARTICULATION*

(*Concluded.*)

By George Wood Clapp, D.D.S., New York

SUMMARY OF STEPS IN ANATOMICALLY ARTICULATING FULL DENTURES

1. Making the Trial Plates.

Secure a good plaster model of each jaw.

Shape a base plate of base-plate gutta percha over each, and trim as for a gold base.

With a ruler and a soft pencil, mark on the side of the patient's face, a line from the lowest point of the external auditory meatus to the lowest point of the wing of the nose. This is the "occlusal plane" and the occlusal surface of the upper trial plate must be made parallel with it.

Lay within reach, near the patient, a silver case knife.

Adapt a roll of soft wax to the ridge of the upper base plate. The base plate with the wax ridge attached will be hereafter spoken of as the "trial plate". Support in the mouth with the third finger of the left hand; lay the blade of the case knife from the heel forward on the occlusal surface of the right hand side of the trial plate, supporting it by pressure of the first and second fingers of the left hand. With the right hand, move the handle of the knife until it is parallel with the line on the side of the face. This will shape the surface of the wax ridge on the right side, parallel with that line. By the eye, trim the other half of the ridge of the upper trial plate to the same occlusal plane.

Trim the ridge of the upper trial plate until it is about a millimeter and a half, 1/16 in., longer vertically in the median line, than the upper lip at rest. Replace the trial plate in the mouth.

Attach a roll of soft wax to the ridge of the lower base plate in a similar manner, making a lower trial plate. Place it in the mouth. Have a patient close the jaws together, until the lips touch lightly in repose. This will give the proper combined height for the trial plates, and the correct proportionate height for each. The cold and hard upper trial plate will shape the occlusal surface of the lower trial plate to its proper plane.

Mark the labial surfaces of the wax ridges for the sizes of the teeth. Select the mould number by the Twentieth Century Method and lay the teeth aside until ready for use.

Have the patient bite both jaws together in proper relations and make continuous scores across the buccal sides of both trial plates in at least two places.

Remove the trial plates from the mouth; put on the models; place together in right relations. Seal together with a hot spatula.

2. Getting the Condyle Paths.

Locate on the side of the patient's face, the head of each condyle and make a plainly visible mark over it.

Heat the mouth piece of the face bow and insert into the upper trial plate in proper position. Put trial plates, fastened together with mouth piece attached, into the mouth. Adapt the face bow. Lock the bow and mouth piece together, and remove all from the face and mouth.

Set the model bows of the articulator parallel by means of the set screw. With the articulator sitting upright, slip recesses in heads of the sliding pointers of the face bow over pins on the joints of the articulator. Move the face bow up and down until the mouth piece and the lower model bow are parallel.

Prop in that position and put upper model in upper trial plate. Push the sleeve on the upper model bow back against the articulator frame and attach the model to the bow in the usual way, enclosing the forward end of the sleeve in the plaster. Invert the articulator, face bow and trial plates; attach the lower model in the usual way, carrying plaster up about the base of the articulator frame. Before the plaster is too hard, cut out the center of the lower model.

Mount the bite gauges in the occlusal surface of the lower trial plate. Put both trial plates into the mouth. Have the patient protrude lower jaw and bite until trial plates come in contact in front. Fasten together with staples at region of cuspids, and seal together on the lingual sides. Loosen the set screws governing the movements of the condyle slots. Mount upper trial plate, with lower trial plate attached, on the upper model, and seal fast. Adapt lower model to rest quietly in lower trial plate and lock the set screws and condyle paths in the slant which permits this position of the model. Remove staples and bite gauges. Engage the spring on the back of the articulator.

3. Carving the Compensating Curves.

Dust white powder on the occlusal surface of the lower trial plate. Move the upper trial plate laterally on lower, and carve. Attach a conical roll of wax to heel of lower trial plate. Pull the upper model to that side 1/8 in. and close till trial plates are in contact on the oppo-

site side. Trim away the excess buccally and lingually. Carry the slope of the flattened roll into the occlusal surface of the lower trial plate at cuspid. Trim upper trial plate to fit lower all around when in central occlusion. Repeat once or twice, until the heels remain in contact during lateral motion toward that side. Build the other side in the same manner.

4. Articulating the Teeth.

Cut away half of the ridge of the upper trial plate. Set half of upper set of teeth, beginning with the central. Set occlusal surface of bicuspids and molars against occlusal surface of lower trial plate, as carved. Either purchase the anatomical moulds which permit this or grind the teeth until it is possible. Wax the teeth firmly in position. Set the other half of the upper set beginning with the central. By lateral movements of the upper model, make sure that the buccal and lingual cusps follow the occlusal surface of the lower trial plate properly in lateral and biting movements.

Cut away half of the ridge on the lower trial plate. Set lower first molar, second molar, second bicuspid and first bicuspid on one side in the order here named. Do the same on the other side. Fill in the anteriors to articulate properly and give natural effect. Perfect articulation as far as possible without grinding.

Try the articulated teeth in the mouth. Replace the lower plate on the articulator. Detach the upper model and vulcanize the upper plate in the usual way. After vulcanizing, articulate the upper plate with the lower which is still on the articulator and again attach the upper to the model bow in that position. Vulcanize the lower plate; articulate it with the upper plate and attach to the lower model bow. Place a paste of carborundum powder and oil on the occlusal surfaces of the teeth, press the plates together and move them through all the movements possible to masticating and biting.

For partial dentures, work out the trial plates to the best possible articulation with the opposing teeth and set the artificial teeth accordingly. For bridges, work out models exactly as for partial dentures. Shape occlusal surfaces of dummies so as to avoid destructive or undue lateral strains.

Sixty-five per cent. of the children who come to the Juvenile Court, Chicago, have bad teeth. The percentage of crime will be decreased if the dental errors are corrected.—W. A. Evans, M.D., Chicago.

TOOTH SHADES AND MOULDS FOR ARTIFICIAL DENTURES

By L. R. Pond, D.D.S., New York

Close observation has convinced me that the use of relatively few tooth shades and moulds will meet all the requirements of good artificial denture making. Following out this hint, I have formed the habit of recording the mould and shade numbers used on all dentures. At the request of the editor I submit the following records from the last fifty dentures made. These are a fair sample of those in my practice.

As I use exclusively the products of The Dentists' Supply Company, I shall be compelled to use their shade and mould numbers.

Shade Used.	Quantity of Each Used.
4	3
5	2
6	3
8	23
9	1
10	16
21	1
25	1
Total	50

Of these shades 4, 5, 6, 8, 9 are yellows.

The manufacturers have given me the following information concerning the shades.

Shade 4 is the lightest yellow and Shade 5 differs from it slightly at the neck, the tips of both being the same.

Shade 6 is much like Shade 4, but has a gray tint in the tip.

Shade 8 is a rather uniform yellow of a straw color. I use more teeth of this shade than of any other.

Shade 9 has both yellow and gray. The neck is a light brown yellow and the tip a pinkish gray.

Shade 10 is of a grayish cast. It is the lightest of the grays, but so closely akin to Shades 6 and 9, that it is usually regarded as a yellow and has even been so classified at times. As will be seen here, it is, in my practice, the most popular shade, save No. 8.

Shade 21 is a dark brown yellow and Shade 25 is a dark yellowish brown.

THE CHOICE OF MOULDS

It is my custom to select the moulds by making built-up trial plates, marking the positions of the lips on these, measuring with a millimeter measure, and ordering by mould number. It takes me about five minutes, on the average, to select in this way and the results have been more satisfactory than ever before in my practice. I rarely need to change the teeth first selected, and the dentures seem to afford the patients great satisfaction.

I have followed the lines of moulds advertised as those most extensively used, with considerable attention. While many of these moulds are very useful, I prefer, in addition to them, some moulds not generally popular. The moulds used on forty-two of these dentures, are as follows:

Anterior Upper Moulds.	Quantity of Each Used.
4	7
5	7
7	1
16	4
26	2
28	11
38	2
45	1
50	2
56	1
69	2
76	1
78	1
	42

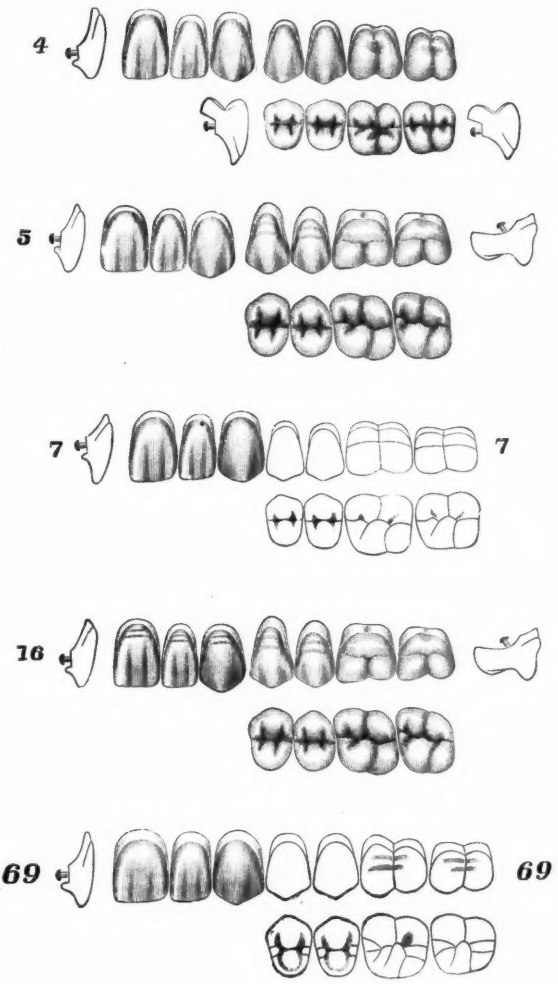
Moulds 4, 5, 7, 16 and 69 are much alike in length, but 16 and 4 are narrower in the width of the combined anteriors. Both these moulds have short combined bite and shut with long ridgelap, and can be used in close bite cases. As will be seen by a study of the outline sections of the centrals, which I have asked to have inserted here, Mould 4 may be used where very little bulk is required to labial of the ridge and Mould 16 where more bulk is required.

Moulds 5, 7, 69 and 28 have centrals of practically the same length, but 69 is noticeably wider in the six anteriors.

Moulds 5 and 7 are somewhat alike in general appearance, but a

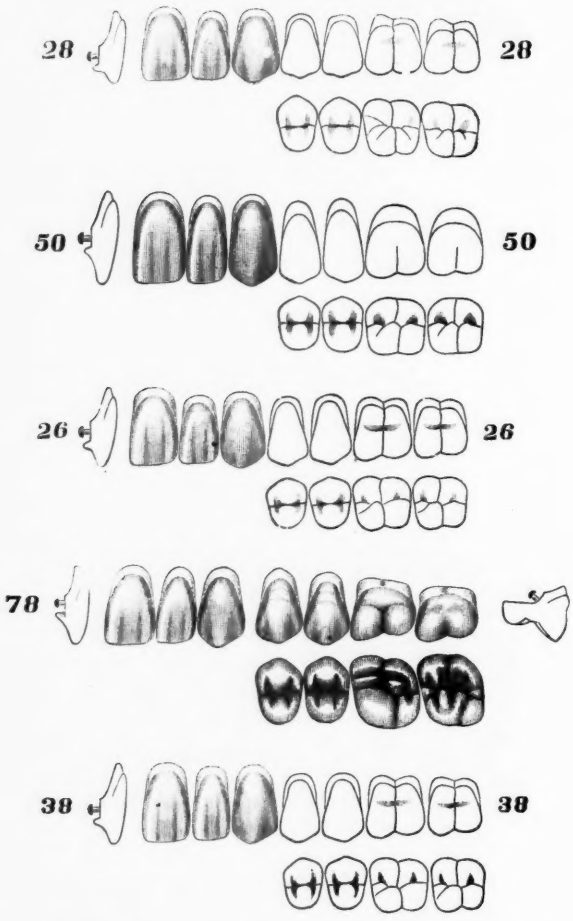
little study of the outlined sections of the centrals will indicate the use of Mould 7 in cases with open bites.

Mould 28 is used for people of the nervous temperament where a rather close bite compels the use of a short bite and shut.



It appears a little strange to me that Mould 69 should find anything like frequent use, but two cases in 42 indicated its use, and it was highly satisfactory in both cases.

Moulds 26 and 78 are of nearly the same dimensions as to length of central and width of six anteriors. They offer about the same length of bite and shut, but the very different curves in the labial surfaces, indicate their uses in faces of different outlines. I use Mould 78 for pa-



tients who require this size of mould, but have narrow chins with perhaps thin cheeks.

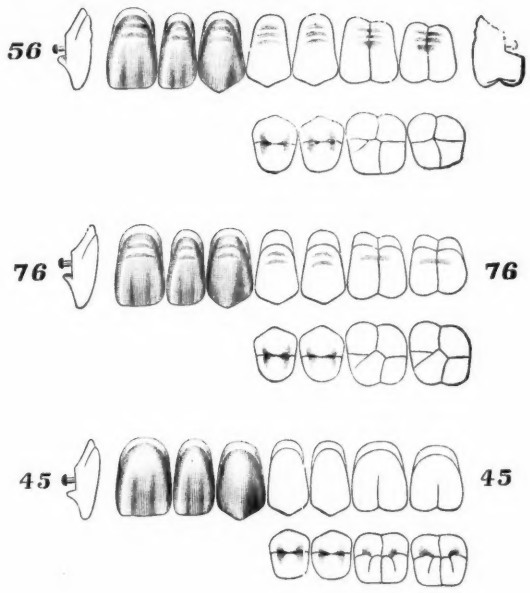
For the plump ones I use Mould 26.

For the longer moulds I use Numbers 38, 56, 76, 45 and 50.

Mould 38 can be used in a closer bite case than either 56 or 76. There are also differences in the characters of the anteriors that influence selection.

Mould 45 falls in about the same class, for length, as Moulds 38, 56, 76, but is a much wider mould. Every once in a while I find use for it.

Mould 50 is the longest of the moulds for which I find common use. It requires an open bite case and long, rather narrow face. But these cases occasionally present and these records show that two cases in forty-two, about 5 per cent., required these moulds.



When the first of the anatomical bicuspids and molars came out I seized upon them and have used them ever since. I got used to Mould 97, in these anatomical forms, and still find much use for it, though I use the other and more recent forms also. They have greatly simplified for me the problem of articulating dentures.

Dentists frequently belittle the value of their services by the terms they use when speaking of them to patients. Dr. Spalding expressed this thought well when he said, "'Cleaning teeth' is a work for menials, but treatment in oral prophylaxis is an operation demanding much professional thought and skill."

Another good expression to use in such cases is: The surgical cleansing of the roots of the teeth and the treatment of the contiguous tissues. —Frederick Crosby Brush.

PLEA FOR NATIONAL BOARD, SO DENTISTS MAY BE FREE

By F. B. Spooner, D.D.S., Brooklyn, N.Y.

The suggestion in this paper, that of a National Supervising Board, is worthy serious consideration. Equally worthy is the suggestion that it should be composed, at least in great part of men of other occupation than dentistry.

Of course we do not own up to wanting protection from the other reputable dentists. Not at all. We only want it from him whom we fear, the chap who can use printers' ink to get patronage. But on several occasions I knew a very decent and gentlemanly practitioner of dentistry to move into a medium-sized community. And the average warmth of his reception by the other dentists, wasn't anything to make him glad he came.

Is Dr. Spooner partly right?

"When the wicked man turneth from his evil ways, and doeth that which is good, he shall save his soul alive." This is what the Book says, hence I hope to be pardoned for all I have written about state boards. I am now practising in a street where there are two dentists on one side, and one on the other. I can hear the dull clang of the sledge-hammer next door, and know my neighbor is making a hundred dollar plate. On the reverse I catch the whistle of the vulcanizer, and opine he is doing business. They are hard at it taking what might swell my bank account. What would it be if there was not a state board to keep out swarms; we would be touching elbows.

The state board is stopping this competition. True, these boards were instituted to good and truly tried students, alien dentists, and the careless colleges, that they turn out only good material; nothing was said of protecting the dentists. But what of a little thing like that? They are good; if we did not have them, I might be making plates for one dollar. A state board is a wise body. Every one is wise who looks out for number one. Hence each state, has a board. No one wants to be crowded. The state boards from trying colleges, get to trying each other; and the strange spectacle was seen of a man with many certificates from other states, being solemnly rejected. I should not object to this, because as I am at home, I want all interlopers kept out.

The Los Angeles (California) "Times," June 30, 1910, tells of the state board there, which cut the heads from 29 candidates out of 45 who faced the trial. They did better this time than in San Francisco six months earlier, when out of the same number of candidates only 18 were decapitated. The rejected are now to go to law, and with ample funds have started the "Justice Association." They say, the boards have got to the point where they are protecting themselves, not the public. There is something in this, because dentistry is done to death,

and I am making a plate for 10 dollars; if the New York Board will do its duty I might get 50 dollars, and not have to make only carpenter's wages, when it costs me five thousand dollars and three years at college.

A state board is a good thing, but it would be better if this "Justice Association" do what is intended, agitate for a board at Washington, who would, for a trifling fee, review the findings of every state board. I am afraid if some such thing is not done, we shall not get out of this "terror." Twenty-nine heads out of forty-five; this is as bad as 1793 in Paris. They had a state board. They cut off the King's head, and a lot of aristocrats', which was all right; but then they got to cutting off each other's heads. What started well ended bad, as the Jacobins cut off the Girondists. It had to end, and when they reached the point—as in California—to cut off half of the prisoners', then something had to be done. History says, "In the morning Robespierre was the ruler of France; at night he was a headless corpse; and Paris screamed with joy."

An able secretary of a state board defined the duties such, by asserting that they were there to keep alien dentists from dropping off the trains, seizing every cent in sight, and degrading our profession. Dr. Hoffman of Denver further says as to state rights, that it is "protection," and I admire his position as any dentist who could "drop off a train" and "shark and skin" is a dangerous man. Too many are thronging into dentistry. In Denver you cannot throw a stone but you hit a dentist.

The "terror" culminated in France after one year. They got so bad then that if a man was known to shave an aristocrat it was the guillotine. We have had the "terror" for over ten years. Men have been rejected by these state boards who were honor men in their colleges; men who had several certificates from other states; men who had tried twice, and been twelve years in practice. It looks as if the end were near.

State boards should hold the colleges, and *they* should be held by a board, who are *not* practitioners, as all men are selfish and many dishonest. No dentist should have all the say as to his brother, or be permitted to decide if he share fees of the public. If the state were controlled by the nation a man in the East with a hollow cough would not say sadly, "I fear I cannot pass," and so pump an engine, spit blood, and *pass* to the other world. A national board would boost the dying man up. He would see light, and not dread to be tried for what he might do. Then Montana air, or Colorado, or California air would be free, and the dentists cry for joy.

THE SOCIAL SIDE OF LIFE *

By Mrs. E. C. Neece, Astoria, Ill.

The editor is willing to wager that the meetings of the McDonough-Fulton Dental Society are worth attending, if this light from the social side is any indication.

Wit is rare, but this paper teems with it. May its good wishes, so happily expressed, overtake those to whom it was addressed.

Mr. Chairman, Ladies and Gentlemen:

In behalf of the wives and sweethearts present, I desire to express to our dentists our appreciation of this evening's entertainment. Flattered because our husbands honor their silent partners enough to give this sumptuous banquet for us, we ladies came to-night, filled with joy and good will. Now, we are filled with rich food, and the present bareness of our dishes is certainly a high compliment to the culinary art of the ladies who prepared this spread.

As we gather at these meetings from year to year, we *cement* the ties of brotherly love and the memory of each gathering is a precious *inlay*. May the McDonough-Fulton County Dental Society prosper, and may each festive occasion be full of pleasure without *alloy* and may the spirit of friendship take deep *root* in the *cavities* of our hearts.

Seriously speaking, this is an occasion of more than social profit. We know that all day the dentists have been exchanging ideas and advocating the best methods in dentistry, and we ladies are as much interested in the advancement of dental surgery as are our husbands and sweethearts. Women, by patience and guidance, may help a man in whatsoever trade or profession he may be engaged. If we read carefully the life of any great man, we usually find a woman's influence dominating it. Therefore, let the men say,

> All honor to woman—the sweetheart, the wife,
> The delight of our homesteads by night and by day,
> The darling who never does harm in her life,
> Except where determined to have her own way.

Then, ladies, let us wield our influence for the good of our dentists. Let us become co-workers with them and take a lively interest in their profession. Women need no longer *hammer* at the portals of education, for the way has been *chiselled* through. The men of to-day, as a rule, recognize their wives as their intellectual mates. Not only can women speak intelligently of dental surgery, but some have entered the pro-

* Read at a banquet held by the McDonough-Fulton Company Dental Society, at Avon, Ill., July 14, 1910.

fession and made a success of it, while others have been and are skilled assistants to husband or brother.

To the dentist, there is no place like home, for it is there that his stomach gets three good meals a day, and his wife sees that his *plate* is *well-filled* with substantial food that develops his muscles so he can keep his *grip* on the public. As time rolls on, the dentists' wives will try to *bridge* all difficulties, and the *ligatures* of love will bind house and office. Then, in their old age, when their efforts have been *crowned* with success, their pockets are laden with *gold,* and their *nerves* are at rest, may the dentists' *impressions* of their wives be so good that they will consider them *models.*

A CHANCE TO SECURE VALUABLE TRAINING FREE

Editor DENTAL DIGEST:

THE following letter speaks for itself:

BELLEVUE HOSPITAL, NEW YORK CITY.
Sept. 23, 1910.

DR. HERBERT L. WHEELER,
12 West 46th Street,
New York City.

Dear Sir:

The trustees have, upon the recommendation of the Medical Board, resolved to appoint a dental interne at Bellevue Hospital, as suggested by you. Will you kindly recommend a competent dentist to fill the place, and advise us what steps are necessary on our part to get the place established?

Very truly yours,

JAMES K. PAULDING,
Secretary, Board of Trustees.

I would be pleased to hear from any qualified young man who would like a year's hospital experience. All kinds of operations are done in the Dental Department of Bellevue Hospital, except gold fillings and other gold work. Also fractures and tumors of the mouth and antral troubles receive attention there by the attending dentists. As there is an average of fifteen or twenty surgical operations a month, sometimes that many fractures alone, the position offers unusual opportunities for a young man to get a year's valuable experience at no cost to himself.

Medical internes in this institution receive their board and room and their operating clothes. It is probable that this position will be put on a similar basis. All instruments are furnished.

This position is open only to dentists who are qualified to practise in New York State, or who can qualify.

Yours respectfully,
HERBERT L. WHEELER, 12 West 46th Street.

DWELLING TOGETHER IN BROTHERLY LOVE

(The following is an extract from a letter received from one of the dentists whose picture appears in the group.—EDITOR.)

The Dentists' Supply Co.,
New York, N. Y.

"DEAR SIRS: They say that 'seeing is believing,' so I send to you a photograph showing that Oshkosh dentists have buried their hatchets and are real friends. In this group you will find ten of our number, twenty miles away from care and trouble, enjoying one of our Saturday afternoons off, which in this case extended until 9:30 Monday morning. This is only one of our outings. You may have your dental meeting and conventions, but the 'outing system' beats them all in promoting good-fellowship and oiling the wheels of competition."

These dentists are all members of the Fox River Valley Dental Society. 1. Dr. C. C. Finney, President of Oshkosh Dental Society; 2. Dr. C. C. Norris, Secretary and Treasurer of Oshkosh Dental Society; 3. Dr. W. H. Ford; 4. Dr. J. G. Schneider; 5. Dr. J. L. Bender; 6. Dr. H. G. Hudson; 7. Dr. A. E. Palmer; 8. Dr. J. J. Gewey; 9. Dr. G. A. Stratton; 10. Dr. Tom Sullivan, representing Wright Dental Supply Co.

BUSINESS BUILDING

Dentistry as a means of service is a profession: as a means of livelihood, it is a business.

SOME COMPARISONS

(Continued from August Issue)

BY T. LEDYARD SMITH

(Third Paper)

THERE is some attention being given to the teeth of children in the big congested living centers, who are too poor to pay the fees of even the cheaper dentists. The benefit, no matter how little, is direct to each child; but the service starts an example that in itself should prove of far more spreading value, in that the example of teaching to a better class the importance of tooth care; the worth of sound dental conditions and the relation of these conditions to the entire physical machinery.

The ignorance of this relation is too general and only in recent years does one meet a physician who comprehends it at all.

We hear much about the necessity of dental students taking the full M. D. course, whereas the real necessity is the other way about. Namely, that the importance of oral conditions is so paramount as to demand that all medical students before they may graduate should pass an examination in dentistry equal in its scope to that of the requirements of the several state boards.

The great value of the example in this charity work to the poor is, in the hope of its lesson to a better class. This work in itself for the poor is within estimate, looking at it direct, individually and sociologically, for they are the product of an imported growth sloughed off from over-sore spots in Europe. For the most part, this product has no blood: no direct strain. Stain, perhaps, rather than strain, for many show the signs of an earlier hybridization. These imported invoices of lots of a thousand a week at times, represent a mongrelized, crossed *get.*

These lots who are landed in this America of all nations, must land as something. Ellis Island can't book the invoice and say "one load of

——" well, anything. They must be taken apart, separated and individualized—Slav, Hungarian, Pole and so on: meaning—nothing. That they come from Southern Russia, Roumania, Servia or Turkey is nothing. They are the drift of an ebb tide flowing down through middle Europe. While their limited vocabulary localizes their birthplace, it only remotely traces their blood strain. By courtesy, on the books they are given a name which shows nationality on the map; but in the flesh they are a much-crossed, untraceable mixture of weak conditions forced down through generations of strife that has flowed slowly westward from India these four thousand years. Middle Southern Europe has seen the eddies of this flow: these patches of left-overs from the drift; this flotsam and jetsam. With a desire for foothold, it calls itself by the name of the shore where it finds itself.

Within a few years after being squeezed through the Ellis Island gate this imported product grows and some of it crosses, marries and adds to the mussy, sluggish pool here a new generation of a further crossed product that often in spite of inherited degenerative tendencies, grows up, and then calls itself "American." In the meantime, during its gasping struggle to hold on, by the very lack of inherited positive cell force, this element gravitates to the slums.

These mistakes then, become a source of irritation and provocation for dispensaries, hospitals, children's aid societies, settlement work, tenement charity organizations and so on. In recent years it has gotten the sympathy of some dentists, and through them the workers in the Children's Aid Society, where, during 1909, 982 children received dental care. During this same period some hundreds of thousands of persons passed through the turnstile at Ellis Island.

It is a doubtful sympathy to be in accord with the idea that this slum mass to the extent of hundreds of thousands, should get, without remuneration, the services of dentists equal to what they would get in private practice. The writer's sympathy is stronger for dentists who have done something for the world than for an imported element that adds to the misery, degeneration and further mongrelization of America.

If philanthropists feel that they must do something unique, bizarre, or that these persons must have dental services when millions of others of longer residence and better status are going without, then let these philanthropists pay full fees for these dental services to the poor.

Leaving out from the gross population, the twelve millions of colored people, we have left over seventy millions of persons who should see their dentist once a year or oftener. If this were to be equally divided each dentist would have to see over two thousand persons a year.

The fact is, that the average dentist sees fewer than four hundred persons a year. Some even fewer than three hundred.

Now, if the lesson given these waifs of the slums is necessary—not the service, but the lesson—how much more important then, could some similar education be, if brought to the attention of millions of citizens whose neglect of teeth play no small part in their various ills that have their origin in the mouth.

Concerted professional energy for public good is at present confined solely to the very substrata of our population, which when traced, will be found to be this product of the huddled steerage mass.

Publicity in dental education is a public need in the ratio of many hundreds of times to one, compared with the needs of this child.

Every local society in every state could well afford to contribute to a fund for the promulgation of public dental education, teaching the people through the press those things about which every dentist is supposed to take his own time and teach in his limited way at the chair. The public press would in time reach the entire body of people; whereas, individually taught by each dentist, it is slow and now confined to a few.

Publicity, backed by the profession would carry weight.

At present, the people as a body are taught dentistry solely by the advertising man. The professional lamp for thirty years has focussed its limelight from the legislature on the man who would dare advertise, and it has left in darkness the public, whose only enlightenment comes from the man the legislature would, if it could, suppress.

Let the few combined men in any one state who are so persistently rabid against the advertiser, enlist the sympathies of all the local societies in that state toward a constant fund to out-advertise the advertiser.

Every profession, every business and undertaking is represented to the public in type, written about, photographed, explained and exploited in the dailies, in the Sundays and in the magazines—with one exception.

What is the answer?

Collecting Fees.—When a patient applies to you for services, unless he is familiar with your method of doing business, make definite terms (at this time your patient will not become offended). You may make your terms to suit the patient, but there should be a definite understanding in each case. Dentists have told me that some of their wealthiest patients often let their bills run for a year or two. This is the fault of the dentist—have definite terms and then keep after the amount until settlement is made.—W. A. Buscho, *The Dental Review.*

A VIEW OF THE BUSINESS SIDE OF DENTISTRY, AND A STATEMENT AS TO THE PROFESSIONAL OUTLOOK GENERALLY*

(*Continued from October Issue*)

By Dr. E. K. Blair, Waverly, Ill.

Dr. John P. Buckley:

Dr. Blair bought out Dr. Gilmer and began his successful career three years after I was born. Now, I am asked to get up here and discuss this problem with these two men. (Laughter.) I knew, as did Dr. Gilmer, that Dr. Blair was sufficiently successful to own several farms in Illinois, and I wondered, being a dentist myself, how it was possible, but I learned from Dr. Gilmer to-night that Dr. Blair always saved a little more than he made. (Laughter.) That is something they may do in Waverly, but which they will not permit us to do here in Chicago. (Laughter.) I have had more than one reason to admire the essayist. I have been with him on committees and on the Council of the Illinois State Dental Society, and have always found him to be broad-minded, liberal and fair, and I am sure the reason that he has met with the success that he has in the practice of dentistry has been because of these sterling qualities which he possesses. If I may be permitted to repeat what I have said before, not to this audience, but to other audiences, I would say that any man can succeed if he is honest, capable and deserving. In this day and age we need men who are honest. I do not believe there ever was a time in the history of the world when there was such a crying need or demand among men for old-fashioned honesty as there is to-day. We are forced to this conclusion when we read of the graft that is going on in this city and in other cities. We need more men, not only in dentistry, but in other walks of life, who are capable, and no man should hope to succeed in life unless he deserves success.

I regret that I did not have the time to write out my discussion as did the two gentlemen who have preceded me. If I had been Dr. Arnold and had written out my discussion and had read over the epitome, I think I would have destroyed the discussion and simply read the epitome, because that is the best thing he said,—"render good service; charge a good fee, and do not stop until you get the fee collected." That sounds good to me. I do not care what fee you get if you get it honestly. If you render service that will be such that you are not ashamed to let another practitioner know that you charged that fee for that work, and then feeling, as the doctor indicated, that you are en-

* Read before the Chicago Odontographic Society, February 15, 1910.

titled to the fee that you charged, try and collect it, and a fee is not worth anything unless you can collect it. The most satisfactory thing to me that occurred at our recent banquet in honor of our dear friend, Dr. Black, was the statement by Dr. Gilmer, namely, that if Dr. Black would choose to do so he could retire from his professional work and live without another effort in that direction; that he owns a farm and a well-paying farm; that he owns enough real estate in Jacksonville, Illinois, to support him. Dr. Blair has indicated that there are two sides to our lives. Dr. Gilmer objected to the word dual life. Be that as it may, Dr. Blair indicated we have the scientific side to develop, and as we are developing the scientific side we ought not to neglect the welfare of ourselves and our family. Where is there a man who has spent more time and money in developing the scientific side of dentistry than Dr. Black, and here in the evening of his life he has accumulated enough money that he can retire, although he does not intend to do so. That is indeed very gratifying to me.

Dr. Blair and Dr. Gilmer both referred to the number of patients that dentists probably have in a year. I think they agree it was about six hundred and sixty-six or something like that. It would be better for our patients, it would be better for us financially and in other ways if we had fewer patients. I was working on a new patient to-day; I examined her mouth thoroughly and found a pyorrheal pocket and told her so, and she said this to me: "Doctor, the average dentist does not examine the teeth thoroughly enough. I have been going to dentists frequently, and I always have to point out to them work to do." I know there are men in this city, and they are friends of mine, who say that they never try to do all the work in one mouth that is to be done; that they cannot do so because they have too many patients. The best thing for such a dentist to do in my opinion is to lose some of his patients; if he cannot lose them in any other way let him charge a little higher fee and he will lose some of them, and the ones he does work upon, let him do all the work that is to be done. Is it right, when you see a small cavity, to let it go, because you are too busy and have not the time to fill it until it is sufficiently large for the patient to call attention to it? I say, no. When you see these cavities fill them, and when you have got so many patients that you cannot work for all of them and do all there is to do in their mouths, do something so that you will lose some of your patients. So I repeat the statement, that it would be better for all concerned if some of us had fewer patients.

Dr. Johnson, in a recent editorial, advocates that when you get nervous buy an automobile. It is a nervous sedative; but a spade in the garden in the back yard is just as good a nervous sedative as a ride in

an automobile. We cannot all afford automobiles, but we can all afford to buy a spade. If it had not been for the fact that our President saw fit to say that I had recently purchased a machine, I would not say what I am going to say, but I will say it now, that no dentist who has a family to support has any right to purchase an automobile until he owns his own home, free from encumbrance, and has a sufficient amount of real estate—I do not care whether it is farm land or city property—to support his family in case something happens and he would be disabled from work. (Applause.) When he gets that he can buy an automobile; but this idea that is prevalent among dentists, as it is prevalent among other men in other walks of life, of living as good as our neighbor regardless of the amount of money our neighbor has, and regardless of the amount of money we have, is wrong. That is a woman's idea and should not be countenanced by men. (Applause.) Both the essayist and others have referred to the fact that we should charge for our work. Only last week my associate, Dr. Elliot, told me of this experience: he saw as nice gold fillings in a patient's mouth as he had ever seen in his life. One of them was a large one in a central incisor which involved by cutting edge and the dentist cut it clear across. This filling was beautifully finished and polished, and the doctor, without being unduly inquisitive, found out that some dentist in Ohio had inserted these fillings, and for the large one he received $4.50. Think of it! He put in good fillings all right, but was entitled to a fee four or five times as large because he rendered the service. There was a man who delivered the goods, so to speak, and rendered service honestly and earnestly, but did not have the nerve to charge the fee. I hope he collected the fee which he charged.

I think the real reason I am on this program to-night is on account of a peculiarity which I did not know I possess. That is to say, I did not suppose I was any different from any other dentist until last week when a patient returned with a bill. She had come to my office; I spent considerable time in examining her teeth carefully, made an appointment, but she did not come back, and she brought in the bill which I had sent her and wanted to know if it was right. I said, "Yes, what is the matter with it?" She replied, "You didn't do anything." I said, "Didn't I make an examination?" "Yes." "And didn't you ask me how much it would cost to have your teeth attended to, and didn't I tell you the fee for the examination and the work would cost so much and made an appointment with you and you did not return?" "Yes, but I didn't suppose you were any different from other dentists." She found out in a few words that she could not come into my office, have me make an examination, and arrange for an appointment for nothing.

No one can come into my office and have me do that without getting a bill. (Applause.)

The real reason I am on this program is that I have so small a per cent. of money on my books uncollected, and Dr. Logan asked me to tell you how I did it. Dr. Arnold would like to have had Dr. Blair go into details. You cannot do it and tell a man how to conduct his business. I have figured out that at the first of this year I had less than four per cent. of the volume of business I did last year on my books unpaid. That is a smaller amount than I would have had had I not written on the tenth of December to those whom I knew could pay that I would appreciate very much if they would remit before the last of the month, as I desired to close my books. That reduced the amount about one per cent. I do not think I ever have of finished business more than five per cent. on my books. I refuse to work for a certain class of people. In the first place, I do not work for anybody who does not pay me. The second class of people for whom I refuse to work are those who do not keep their appointments. I do not care how much money they have got or how anxious they are to pay for the broken appointment, I will charge them once or twice and if they continue to break their appointments, I do not want them. And a third class for whom I refuse to work are those who do not appreciate my services. I do not want to work for a patient, for example, who thinks that Dr. Dittmar, or any other man in this room, can do the work better than I can. My patients want me to do their work, as yours do you, and I presume that because I refuse to work for all classes of people it accounts for the fact that I have so little money on my books or bills uncollected. Here is another thing, if you will permit another personal allusion. A patient comes in and wants a lot of work done and says nothing about the amount of money it is going to cost, and makes arrangements for the work. In some way I indicate to them how much the cost is going to be. If I explain to them that the work can be done in a certain way for so much, and no questions are asked. I also indicate it can be done in another way, but that this is the best way and will cost a great deal more. That brings up the question as to how much will the other cost and how much more will this cost, and thus we have an understanding as to the probable cost. If they cannot afford to have that done, then they can afford to have it done in a cheaper way. In the same way, if I cannot afford to wear a silk hat, I will wear an ordinary cap. If a patient cannot afford a nice gold inlay, then he can afford an amalgam filling. There are too many dentists who do all work for patients in the most expensive way without looking into the question of money or suggesting to the patient how much it is going to cost. The fee they are going to

charge for a particular kind of work is so-and-so, and they make no arrangement whereby they expect to have these payments made.

Now, Mr. President, having alluded to myself, which you wanted me to do, I will leave the floor for others to enter into this discussion.—*The Dental Review.*

DETERMINING OPERATING COSTS

In several recent numbers of this magazine the request has been made that dentists note and report the time required for each step in each of certain standard dental operations. A few reports have come in, but not nearly enough. Dentists whom I meet tell me they mean to do these things, but don't get at it. I know it is difficult and that it is a bother, but if our financial salvation is ever worked out, we must do it by the sweat of our own brows, by taking trouble and putting up with these nuisances *for our own sakes.* No one is to come along and help us from without. If we're to be helped, we must help ourselves.

So take the trouble, if you will, and send in the results. Then we shall be one step nearer learning what it costs to practise; *and that is the first logical step toward satisfactory fees.*

Here are the operations. Report on as many others as you like:

1.—Crown—Grinding tooth, fitting band and top grinding, polishing and setting.

2.—1 x 1 Bridge—A bridge with one abutment and one dummy, grinding tooth, fitting crown, bite, impression, pouring, separate, mount, separate, choose teeth, set up, invest, solder, grind, polish, set in mouth.

3.—2 x 2 Bridge—A bridge with two abutments and two dummies. White dummy facings (details same as No. 2).

4.—2 x 2 Bridge—All gold (details same as No. 2).

5.—Gold Inlays—Separating tooth (number of trips and time), prepare cavity, impression in wax, invest, casting, cooling, grinding, adjusting and cementing. You will find the time consumed in this is more than in a crown.

6.—Plates—Impression, pouring, separating, preparing bite, and mounting on articulator, separating, choosing teeth, setting up, wax up, investing, packing, vulcanizing (just estimate time in putting in and out vulcanizer) scraping, polishing, set in.

7.—Partials—Details same as No. 6.

8.—Abscess Teeth—Time of examination, opening up, time of each successive treatment, closing and refilling tooth.

9.—Repair Plates—Details same of No. 6 (special care should be given this time for various details as it is the worst paid piece of work).

10.—Taking Old Amalgam fillings out, devitalizing, number of treatments, filling canals, replacing fillings.

(Be very careful of this time.)

11.—Estimating repairing broken facings on cemented bridge in mouth, including burs, time in removal, cleaning and drilling out old

cement, replacing bite and impression taken, pouring, separate, etc. (as in No. 2).

The following reports have been received:

U. R. 2d molar. Patient over 50 years of age, and exhibiting pulp stones. Remove pulp and put in gold inlay.

	Minutes.
Putting in arsenic	15
Removing pulps in presence of pulp stones	91
Filling canals, preparing cavity and making wax impressions for inlay	40
Trimming inlay, setting and polishing	54
3 hours, 20 minutes	200

CASE No. 2

Treating upper second bicuspid, alveolar abscess.

First treatment	17
Second treatment, lanced gum	3
Third treatment	19
Final treatment, filling root canals, pack with gutta-percha	26
Allowing a little less time than on the above case for preparing cavity, making wax impression for inlay, trimming, polishing and setting, we should have	69
2 hours, 14 minutes	134

CASE No. 3

Lower left second molar, buccal cavity.

Removing pulp with cocaine	40
Filling roots and putting in amalgam filling	35
	75

Yours truly, IOWA.

Editor DENTAL DIGEST: I herewith gladly furnish the actual time I was engaged in making a couple of gold cap crowns for the two superior incisor stumps. These figures may show rather slow working, but I do not make a specialty of this, or run a gold crown laboratory.

Dressing down stumps, taking impression and the bite	30 minutes
Pouring plaster, etc.	15 "
Wetting paper patterns and putting into articulator	35 "
Simply making first crown	1 hour 40 "
Simply making second crown	2 hours 10 "
Filing down and polishing	35 "
Adapting both crowns and cementing	1 hour 05 "
Total	2 hours 45 minutes

Trusting the above will prove of service in your praiseworthy investigations, I am,

Fraternally, (signed) W.

DENTISTRY OR THE STAGE

A CERTAIN popular dental salesman has a baby which is evidently destined for dentistry or the stage. At the age of fifteen months it submitted to being arrayed as if it suffered from the toothache, and assumed an expression which is here shown. This is the more remarkable as the child has never had a toothache.

FIRST INVESTMENTS

AN idea worthy of serious consideration was recently advanced by a successful Iowa dentist. Said he, "I do not believe a dentist should invest his first savings in a home, because if he does, it may be a burden to the family rather than a source of profit. My father left my mother a home. It is now worth much less than he paid for it. If he had left her nothing else she would have been in a bad way. Life insurance first and good bonds and stocks next are the best investments for the dentist's first savings."

The dentist who spoke as above is very well-to-do and spoke on a subject with which he is familiar.

A PROMINENT dental supply house has just published the following statement:

A GREAT MANY OF OUR CUSTOMERS discount their bills in advance. One of them earned $66.66 with $100.00 last year, which is equal to 66 per cent., and any number of them made from 33 per cent. to 44 per cent. on their money.

Can you afford to let this chance pass?

MY IDEAL WAY OF THE FURNISHING AND EQUIPMENT OF A MODERN OPERATING ROOM

By F. R. Merz, D.D.S., Chicago, Ill.

The floor is to be covered with linoleum, representing inlaid floor. The walls to be calcimined dark green. The dental chair to be a Favorite Columbia No. 2, latest style, with a Clark fountain cuspidor attached. Then the great labor-saving electric dental engine (Ritter). A modern nitrous oxide outfit, such as the Clark-Hurd outfit. I would prefer a small-sized cabinet to the right of the chair, and a Holmes bracket table swung from the left side of chair. An up-to-date sterilizer within easy reach and in plain sight of the patient, *and use it.* If possible a lavatory, hot and cold water, in sight of patient so they can see that we wash our hands before we begin the operation. A small roll top desk with phone on top, near the window, lends a business air to the room. Plain sash curtains to each window. A display of diploma and state license is proper in the operating room only, and not in reception room. As operating rooms are generally small no pictures on the wall are necessary, except a small neat sign on left of chair, with, "Deposit required on all work," and insist on getting it. I would have only one chair besides the desk chair, and that to be a small rocker of weathered oak. I have no office girl, but have a push button in reception room and a buzzer near chair in operating room. The sign reads, "Dentist. Please ring."

Editor Dental Digest,
No. 47 West 42d Street,
New York City, N. Y.

Dear Sir: For fear that some of my brother readers of The Dental Digest would not have the opportunity of reading the article in the September number of *Hampton's Magazine,* entitled "Tooth Tinkers," I wish to take this opportunity to urge upon them to read this article. It is well written and appeals to the public as well as the professional man.

After reading this article, I think each dentist who has the good of his profession at heart should write the editor of *Hampton's Magazine* a letter thanking him for this publication. By all means, read this article.

Respectfully yours,

September, 1910. J. S. Furnas.

EXPERIENCES WANTED

It seems that nothing which appears in The Dental Digest is read with more interest than these EXPERIENCES. No matter how commonplace yours may be, it has its struggles and its conquests or failures. And these, simply told, make most interesting reading, like the Personals in the village paper. Men like to know how others in the same line are doing, whether they find the path rough or smooth, whether they win their battles or fall short of complete victory. Sometimes it comforts us wonderfully to know that we are not the only ones who do not make noticeable successes. As one dentist wrote: "I was pretty well discouraged till I read those EXPERIENCES. Now I see I'm not doing so much worse than others."

AS A SLIGHT REWARD

we will send to each dentist whose story we may accept, a copy of Brother Bill's Letters, in book form. If you want to make a present to some fellow practitioner of dentistry or medicine, or if your copy is as well dog-eared as some the writer knows of, you will welcome this. There are not many copies left, only a few in fact. They are not for sale, but one can be earned in this way.

Do not try to "make a story." That will spoil it. Just write it out plainly and simply as you would to a friend. No matter about literary style. There really isn't such a thing anyway, so don't bother about it. Just write it as you wish. We will do the rest.

Editor Dental Digest:

I have been reading with interest your "letters," also articles from others endeavoring to show the dentist how to make a profit.

After twenty-five years in practice, I am satisfied that no other profession yields such a poor return for the *honest* man. The advertiser and the plausible liar are the ones who get the business.

There is one thing more reprehensible than any other as regards fees. We spend hours in treating teeth which should have been attended to months before, and make no charge. We spend hours in extracting teeth when plates are to be made—and no charge.

We spend the Sundays, when we should be resting, in working over patients who could many times just as well come during the week, and we charge no more than for any other time. Where is there a mechanic in any trade who does not charge double prices for Sunday work?

We spend hours in coaxing refractory children to allow us to fill or extract, and parents are astonished if we make the charges on the same basis as for adults. They expect cheaper prices because patients are younger.

The dentists are themselves to blame. They have educated people to expect just those things and, in my opinion, it will take many years to change them.

There are some things which I have altered in order to keep my own self-respect.

I always make an extra charge for time spent in treating. If people will not attend to their teeth until they ache, I don't propose to spend extra time for nothing.

I always charge those transient patients who come in "just to have a little something done to stop this toothache."

I always aim to get as much extra pay as possible for Sunday work, but I must confess that in this particular, as also in "extracting for plates" I haven't been able to change things much so far.

I have one son who is a dentist. He made a fair success and some money by starting in a Western State, where people do not expect to have their work done for one-half a mechanic's wages. But if I had any more boys to educate, they never would take up dentistry if my advice would prevent it.

Yours,

MALDEN.

Editor DENTAL DIGEST: I have been interested in reading your business notes and how to better one's earning capacity. There seems to be a need of it in the dental profession. If it is true, as one of our journals says, that the average income of the dentists in the United States is $1,250 per annum—it is not a very good prospect for a smart young man.

The old adage, that a penny saved is as good as a penny earned, I learned when a boy. Also the fact that the simpler a thing was the more valuable. In connection with these two simple truths—I want to tell you about *my* electric dental engine. The electric dental engine as given to the dental profession has seemed to me to have about as many parts, and as complicated as a locomotive and to cost accordingly. This summer I had a present of an electric fan, 8 inch, 100 to 125 volts. I had it on my dental bracket for the benefit of my patients as well as of myself. I had an S. S. White foot engine. And the question came to me "Why not combine the two?" First I wanted a pulley to put on the fan. I found just exactly what I wanted on an old en-

gine; it required no changing. I took off the fan, put the pulley on and then the fan was put back. I slipped the cable-arm and pulley-head from the upright on engine—the spindle was only 2½ inches long—so I took a piece of brass tube 6 inches long, had it threaded to go in the pulley-head, and the other end for a thumbscrew, bored a 5/16-inch hole through the table in the partition between the drawers—with washers on top and bottom; it was fastened tight. I placed the fan so the two pulleys would be in line connected with a twisted leather belt, 16 inches long, all that was needed. I started it up and I had just as good an electric engine as I needed, and I don't see why it is not just exactly as good as any on the market, and less likelihood of its getting out of order. The whole cost, including the fan, was *less* than $10, instead of $115, as they are listed without the cable-arm and pulley-head. The swing of the bracket gives all the motion with the S. S. White cable that is needed.

It does the business. Anyone with a foot engine can change it into an electric engine, and need not expend over $10.

The engine listed for $115 is marked 104 to 110 volts. My fan is marked 100 to 125 volts. If one wishes more power simply take a larger fan at $2 or $4 more.

I claim my engine is the simplest, the cheapest, and the *best* electric engine.

B. B.

AN ETHICAL ADVERTISER

Sometimes the other fellow is convinced that there is as much of right on his side as there is on ours. Maybe dire necessity drove him to his present viewpoint, as this writer said it did him.

Anyway, he is entitled to a hearing.

So long as the articles are temperate and sincere, so long as they really throw a little light on this subject of Ethics that is stirring in so many minds, THE DENTAL DIGEST desires to give them fair presentation.

If this dentist is mistaken, write your reply. Don't be intemperate. Don't condemn him until you have decided what you would do when you and yours "nearly starved to death." Perhaps he is prosperous now. Perhaps he can be converted back to the faith we pretend to hold.

If your article is as temperate and straight to the point as this one, THE DIGEST will welcome it.—EDITOR.

Editor DENTAL DIGEST:

I AM an advertiser. I am ethical. Therefore, I am an ethical advertiser. If a patient of mine should ask one of my so-called ethical

competitors about me, he would say, " He is not ethical." If I should ask for admission into any dental society, I should be refused. Yet there is not a dentist anywhere who is more honest with his patients than I. For four years I was in " ethical practice," that is, I did not advertise. When my patients asked me about " advertising dentists," I told them that they could not afford to use good material and do good work at their prices. I did not tell them, however, that I was referring only to the faker, and that there were advertisers who were doing the best of work and treating their patients honestly. I did not tell them that a dentist who did his duty towards his patients was ethical, be he an advertiser or not. Nor did I tell them that the dental societies twisted and misused the word " ethical " as much as the fake dentist does the expressions " teeth without plates " and " vitalized air."

During my four years of ethical practice I nearly starved to death. I soured on the world and my profession and was dissatisfied in every way. In this condition I do not think I contributed to the elevation of the dental profession. I do not think the community was much enlightened for my being in it. I advised my patients as to the care of their teeth, etc. That was my duty. But where I have ten patients now I had only one then. I advise the ten now the same as I did the one then. Have I not enlarged my field of usefulness? If I cared for the teeth of the one in such a way as to bring him to realize the importance of persistently caring for his teeth, surely I was an ethical dentist. Now if I increase that number tenfold by advertising, can it be possible, Mr. Society Member, that I become a non-ethical dentist? My, gentlemen, how we do twist that little word " ethical! " But I tell you it is getting tired of being twisted, and we have got to quit it or it will lose its identity altogether. Let's open up our hearts and be really and truly ethical. Give credit where credit is due. Fight the faker rather than the advertiser, for by fighting the advertiser alone we miss so many of the fakers. One of my competitors said to me, " When the nerve of a tooth is exposed, I tell the patient that the tooth has to be extracted and a bridge put in its place." Another dentist once said to me, " Don't fool with fillings; put on crowns: there is more money in it." These are the kind of men we must fight. I would talk for an hour to dissuade a patient from going to a dentist like that and feel that the hour was well spent.

The more patients the truly ethical dentist has, the fewer the faker gets. Yet, if in order to get them, the ethical man advertises, he is unprofessional, non-ethical. If he does not advertise, he stands idly by and sees people being humbugged that he could save. It is, in my mind, a question of loyalty to the dental society or to the people. I will be

loyal to the people. I am in their midst for that purpose. I look to them and not to the dental society for my livelihood. They are my friends and neighbors, and I shall not forfeit their respect. Yours, N. J.

A LETTER AND A REPLY

Editor DENTAL DIGEST:

I wish you would advise me how to handle or what to do in a case like this.

A man worth, say $50,000, sent his sixteen-year-old daughter to me to have her teeth "fixed all up," as he called it.

I put in—

32 amalgam fillings at $1.00	$32.00
8 gold fillings, large ones, in incisors and cuspids	39.00
9 treatments at $2.00	18.00
1 Jodo cement base for a filling	1.00
Cleaning	1.00
4 fillings in roots of teeth	4.00
	$95.00

The young lady was up to my office thirteen times and stayed about two hours and thirty minutes each time—makes about 32½ hours' work for $95.

She was very hard to work for, but I did her a fine job; am really proud of it. The man had a fit. When I presented my bill he paid it, and said he was going to put it in the paper, and pay for it for a year. I told him to go ahead.

He had this work all done three or four times before and it came out. I did work for his other daughter and it got me this job. Now he says I held him up. I don't think I did; it was my regular charge. The largest gold filling was $6. Took me about two hours and thirty minutes to put it in. Now I did this girl fine work, it was worth the money, and still they kick, so what is a person going to do? I suppose you will say let them kick. I do not like this kicking as I have a nice practice here and do not want to lose it, but I think my prices are as low as I can do the work and do it right. What would you advise?

About four months ago I put in thirteen amalgam fillings for the man and he did not kick at the price, $13. I told him when he kicked about the $95 for his daughter of sixteen, to take her to any good dentist and ask him if the work was not worth the money. But you could not tell him a thing. He said he was held up, and that was all there was to it.

Yours respectfully,

F. J.

SEPTEMBER.

Dear Doctor:

I have just returned from the West and find your very interesting letter awaiting attention. I think that you have done exactly right in the case as you outline it, and that the only thing for you to do is to maintain the position you have taken. I have had occasion to do this in a number of instances and have never lost by it in the end.

You will, of course, recognize that when the parties of this transaction have recovered that equanimity which they ordinarily possess, they will be very much better subjects for any educational work which you may care to do.

Yours respectfully,
GEORGE WOOD CLAPP.

WILL SOMEONE ADVISE?

Editor DENTAL DIGEST:

At 6:30 Saturday evening I received a telephone call to come to my office as quickly as possible, as a "little boy had fallen down the steps and knocked his teeth out."

Here's what I found upon arriving at my office. The "little boy" proved to be a baby just 17 months old, with his two lower centrals lying horizontally and protruding his lower lip. Upon as close an examination as I was able to make, I found the process fractured, gums lacerated and bleeding. I could plainly see from the incisal edge to the apical foramen. The gums around the two centrals were tight, resembling a gum section. I advised extraction, which I immediately did, after considering the prognosis, which, had I been able to push the teeth back in place would have been bad, as the teeth would certainly have abscessed, as the nerve was severed at the apical foramen. I also considered probable infection or necrosis, hypertrophy, or a sloughing of gums. Have seen case once since extraction and gums are healing very rapidly.

Now that poor little fellow will have to wait five or six years before the permanent teeth erupt. I would like to know if I was justified in extracting, and would like to hear from readers of THE DENTAL DIGEST. Also what is the probable outcome of the space caused by the now missing centrals.

Trusting to hear from others, I am,

Fraternally yours,
M. R. F., D.D.S., Chicago, Ill.

DEVELOPING OURSELVES BY DEVELOPING OTHERS *

It is to be regretted that your kind request to send a paper for the opening meeting of your winter series cannot have a better reply than the short time allowed makes possible. There is a political phrase now much used for the first of a series of political meetings; it is said "to sound the keynote." Very likely this meeting of yours will "sound the keynote" for your winter's work. Perhaps a few suggestions from one who, though far away, is interested with you, may not come amiss.

One suggestion is that this may be a good year to perfect your organization. It may seem to you already perfect or nearly so. And in giving pleasure and profit to those who attend, it may be. But if there is in your city a dentist who can be won to your work and has not, the organization is yet imperfect; it is a little narrower than it should be.

Please note that that sentence read "who can be won," not "whom you would like to win."

The world contains many people whom we might win if we would only take the trouble. But we don't care to win some of them. They do not seem to us to be "worth while." They have apparently little to add to our knowledge or skill. They may not dress well or talk well or appear well in society. And we pass them by, not caring very much that they may need us; and not realizing that in developing them we should develop ourselves.

Our profession is bigger than any of us. And its onward march is held back by its backward practitioners. We look with pride on the work of our leaders. We plume ourselves on the luster that shines from them onto us, forgetting that the shadow of the backward man falls on us also.

No dentist is neglected by his fellow practitioners who does not both know and feel it. And the motive of his life may rise from these bitter springs of neglect. The things you individually and as a society

* Read by Dr. E. S. Barnes before the meeting of the Seattle City Society, September 6, 1910.

would effect in the community are often retarded or prevented by the influence of this man, who, neglected by his professional brethren, yet has his friends and his influence.

It may be that in some future life we shall have that clairvoyance of vision which will enable us to see the relative deserts of different people clearly. Such vision now would overturn our lives. For, very often, the man whom we do not think it worth while to captivate deserves better than we. Perhaps he never had a fraction of our chance. These men who come from the homes of the very poor, where the parents were poor, not in money only, but intellectually poor as well; these boys who have divided the scanty resources of the home among several, and yet have risen to some place in life, have often trod on roads which we might not be able to tread. In their places we might have utterly failed. And often there lies behind the rather dull surfaces of their lives stories of patient endeavor and effort for others which our own more brilliant courses might not be able to duplicate.

One thing is sure, that because a man cannot do well the thing we do well is no sign he is not our equal. And when we think rightly it will be no excuse for either despising or neglecting him. Even if he be as dull as he looks and acts, we can rightly develop ourselves by developing him. For the profession ties us all in the same sack.

Sometimes men do not deserve to be won. That is very true, quite as true as that none of us deserve the sun and showers, the beauties of earth and sky, and liberty and the pursuit of happiness. We have some of these things by the free gift of God and some because others deserved them and won them by toil and sorrow and death. If we had only what we deserve we should have little indeed.

Men must be won for two reasons. First, they need us. Second, we need them.

They can be won in only one way, by a sincere manifestation of interest and friendship. For whichever of you does the winning, must win them for himself first and then for his cause. " Confidence is always in persons at first, never in things."

See if you cannot win these outsiders first for yourselves and then for your cause.

Make every one of your meetings interesting. Just now, dentists everywhere are interested in the business side of practice. Some of them are making money for the first time. Many desire to make money, but don't know how to go about it. A little help would start them right.

Put a little business into each program and have it first, so as to get the weaker members out early. They'll probably stay to hear the rest of the program.

The wisdom of keeping your business program close to the facts of practice cannot be too strongly emphasized. Stick to the facts. Get the costs of running the office per hour, the time for certain standard operations that are performed daily, and the material costs. Let each man then determine what it costs him to treat a tooth, to put in gold and porcelain inlays, to put in amalgam and plastic fillings, to make different forms of plates and bridges. Let him add together his time and material costs and his salary and he will have his fees on an intelligent basis.

Don't get into the pitfall of a uniform fee bill.

Discuss the education of patients to pay profitable fees, the best methods of collecting promptly; exchanging information about "dead beats"; the most advantageous form of buying; the profits from discounts, investments, etc.

The education of your local public to the value of dentistry will afford the topics for interesting discussion. What has been done in your community to spread a knowledge of the importance of proper oral hygiene? How many parents understand the relations between oral hygiene and the physical development in children? How many parents or educators know just *why* a child cannot breathe properly with teeth seriously out of normal relations? How many parents and educators appreciate the relations between proper nasal breathing and proper mental development? How many physicians, parents and educators understand the relations between unhygienic conditions and individual or epidemic cases of scarlet fever, pneumonia, diphtheria and tuberculosis? How many people in your community understand that it costs that community far more money annually to teach children who are backward in school through defects traceable to unhygienic oral conditions, than it could cost to care for all the teeth of all the poor children?

Your members have or can get much interesting information on all these branches of this subject and you can diffuse it through the community to the very great benefit of all concerned.

Then what shall you do to perfect yourselves? A prominent dentist says that not one hundred dentists in America are doing for their patients all they should do. What should be done? What is the broadest conception and application to our duty? When shall we get mouths clean and keep them clean, and how shall we do it? How shall we put mouths into condition to function properly?

These and allied subjects in many phases may make your winter profitable to all within the range of your influence. The members of ordinary ability can handle these, *always sticking to the facts.* For in

dental meetings he who says plainly what experience has taught him is the most helpful.

If you handle these subjects well, if they become part and parcel of the practice of your members, their influence will reach farther than you know. And lives you have never known will be benefited because of this winter's study by The Seattle Dental Society.

You have the writer's very best wishes. That this may be the best winter you have ever had, that it may be only the earnest of still better ones to come, is the wish of

BROTHER BILL.

RANDOM THOUGHTS

You may know your business thoroughly, but unless other people know that you know it, what good does it do you?

Being Ethical—dealing fairly with everyone, one's self included.

A man who does not learn to live while earning a living, is poorer after his wealth is won than he was before.—*J. G. Holland.*

One of the surest things in this world is that the kind of man who thinks he is "burying his talent" by living in a small town, could carry it to the city in the corner of his eye.—*Dallas News.*

Every progressive dentist should have a library of models consisting of carefully made plaster casts of various forms of malocclusion and other abnormalities that have come under his observation.

A difference between a commercial man and a professional man is, that a commercial man knows the cost of what he has for sale and bases the charges accordingly, while a professional man doesn't, and doesn't. —*Frederick Crosby Bush.*

You will not have your proper standing in the community until no teeth are neglected.—*W. A. Evans, M.D.*, Chicago.

PRACTICAL HINTS

[This department is in charge of Dr. V. C. Smedley, 604 California Bldg., Denver, Colo., to whom hints of a practical nature may be sent for publication in THE DENTAL DIGEST.]

TO ETCH THE SURFACE OF A GOLD INLAY.—When the inlay is ready to set, coat the surface you want cement to adhere to with mercury, spreading the mercury around with the aid of a pellet of moist cotton and a pair of pliers. Then hold over an alcohol flame and slowly drive off the mercury, leaving a rough crystalline surface, to which cement will adhere.—C. J. HADLEY, *Dental Review* (from *Pacific Dental Gazette*).

A WAY TO HAVE CASTINGS COME OUT CLEAN.—It is a fact that inlays after casting oftentimes have what is called a silicate coating, and it has occurred to me, that possibly this was the result of the smearing of saliva on the wax form. For some time I have been washing all these wax forms in water, then in alcohol, and have not yet one case of such coating to report.—E. R. CARPENTER, *Journal Dental Science* (from *Pacific Dental Gazette*).

CASTING OVER PORCELAIN BRIDGE TEETH.—When casting over porcelain bridge teeth, if you will place a piece of iridio-platinum bar tightly between the pins before casting, it will be almost impossible to break the porcelain, provided it is well heated and the porcelain surface is flat and not convex.—WESTON A. PRICE, D.D.S., *Items of Interest, Sept.*, 1910.

IODIN AS A GERMICIDE.—The late Dr. Senn thought iodin the most potent of all germicides. His favorite preparation was 1 per cent. iodin crystals and 1 per cent. potassium iodid with 98 per cent. of water. This he used freely, flushing the abdominal cavity, especially in cases of infection. He declared that many of his patients who recovered with the use of this treatment would have been lost without it.—DR. T. W. BROPHY, Chicago, *Journal American Medical Association, Aug.* 6, 1910, page 498.

For Trimming Lingual and Distal Contour.—Use coarse carborundum disks for trimming lingual and distal contour from molars and bicuspids to be crowned.—R. A. Adams, D.D.S., Denver Colo.

For Slow Separation.—Twist a few fibres of cotton around a ligature, slip between teeth and tie around contact point for slow separation. It is just as effectual as rubber, less likely to come out, and causes less soreness.—V. C. S., Denver, Colo.

A Good, Quick, Easy Esthetic Crown for Any of the Teeth (in the Lower Jaw Especially) Where the Gingival Third to Two-thirds of the Tooth is Ordinarily out of Sight.—Select a pinless crown (any make) or diatoric tooth to suit case, and grind to gradual taper or cone shape gingivally. Cut root and crown just short enough so that crown may rest roughly upon root with jaws occluded. Trim all contour from root as for ordinary carefully fitted gold crown; take measurement of root, also of porcelain tooth about midway of bevel; mark both measurements on the sheet of gold plate at distance apart you think required for greatest diameter of band; cut and solder (or preferably sweat) band.

Now between wooden blocks drive tooth into band, trim and grind to feather edge in contact with porcelain. Then place upon root, trim and grind band to conform to irregularities of gum line, extending about 1/16 of an inch beneath free margin all around. Grind porcelain to final occlusion, and set with thin cement. A pin may be adjusted to extend from canal to hole in crown to afford additional strength, if thought advisable. But writer does not believe pin often necessary if band is carefully fitted.—V. C. S., Denver, Colo.

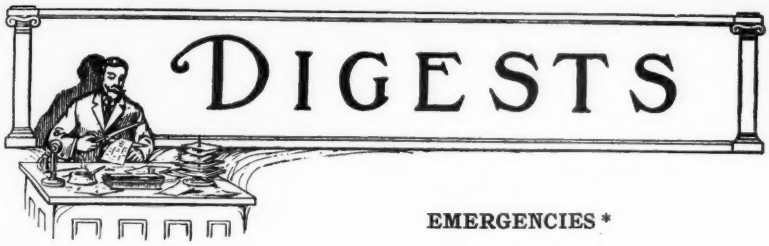
Regulating Extremely Constricted Upper Dental Arches by Stationary Anchorage.—In the treatment of extremely constricted upper dental arches stationary anchorage offers advantages over the usual methods of expansion. Not only is the degree of outward tipping of the buccal teeth very much reduced, but the tendency to develop increased nasal capacity is without doubt increased. In the employment of elastic force control may, in the majority of cases, be maintained by so adjusting the appliance that the elasticity will have spent itself by the time the desired movement is effected. When rubber elastic bands are used, the strength of the pull may be closely gauged by selecting bands of suitable size. In many cases where rapid movement is desirable, and extra force is resorted to for its

accomplishment, the extent of movement may be regulated by placing a little lug or spur or hook in such a position on the moving tooth that when the desired position has been reached, the spur or hook will engage some other part of the appliance, and thus make further movement impossible. Little devices of this nature are always suggested by the exigencies of the case under treatment; whether or not they are successfully met depends upon the judgment and ingenuity of the operator.—F. C. KEMPLE, *Items of Interest* (from *Dental Cosmos.*)

CABINET FOR A LIBRARY OF MODELS.—An attractive cabinet for a library of models may be constructed by using sectional book cases into which a series of step shelves have been built. The enlargement of such a cabinet will keep pace with the increase in the number of models obtained.—*F. C. B.*

BRITTLE PLATINUM PINS.—It has recently been suggested that excessive heat in soldering will cause the solder to alloy with the platinum of the pins whereby they become granular and fragile. While soldering is really an alloying of the more fusible with the more infusible metal, this alloying should be confined to the surfaces. When the heat is more than just sufficient, or when the solder is kept in fluid condition a long time, it eats into the metal, and the alloy penetrates deeply, especially if the solder contains a metal having a strong affinity for platinum.—*The Dental Brief.*

ALUMINUM CASTING IN AN OPEN FLASK.—Dr. Robert J. Seymore, of Philadelphia, has devised a flask for casting aluminum plates that can be opened to remove the wax model. It is in two parts, like the usual vulcanite flasks, but lighter and more accurately made. The case is invested much as is a vulcanite case, the lower part of the flask receiving the model, and the upper part the sprues or leaders for the metal. The advantage claimed is that the wax is readily removed; much can be picked out, and that forming the sprues may be washed out with hot water if not otherwise removable. In casting a plate for a full denture so much wax is needed for the model, that it is not so readily burned out as is the wax of an inlay or small bridge. There is always a risk that some residue may be left, or that during the burning out of so much wax, some injury may be done to the mould that will impair the final result. This is avoided by using a flask that may be opened.—*The Dental Brief.*



EMERGENCIES *

By Dr. George O. Webster, Berlin

The dentist does not share with the general surgeon the daily, even hourly, possibility of meeting cases where the issue of life and death are dependent upon his coolness, knowledge and judgment, but, and this is especially true since the almost universal use of the various preparations of cocaine, there does at all times exist in the borderland between dentistry and medicine the possibility of more or less alarming crises where the dentist must be equally well prepared and must justly be held responsible for any lack of knowledge of the conditions or the remedies demanded.

* * * * * * * * * *

There are, however, one or two points which I should like to be able to bring forcibly home to you. The first, and I am inclined to believe the most important, is the necessity of exhibiting calm and deliberate judgment in these imminent emergencies where under the fear and excitement of the moment nervousness and indecision are so much more liable to prevail.

Overconfidence might be equally disastrous, but we refer to that degree of self-reliance and confidence which can only come from both "knowing what you know and knowing that you do not know what you do not know," and this state of mind cannot exist unless we have both the necessary knowledge and are fully prepared to meet with promptness and decision those emergencies to which every dental practice is liable. As one important means to this end I would suggest the employment of a special case for keeping together and always having at hand the necessary remedies and appliances.

It is needless, I trust, to say that this case should never be called upon to supply the demands of the daily practice, but must be kept carefully filled and ready for instant use.

Personally, I prefer the case to a drawer or compartment in the operating cabinet. It is less liable to be interfered with by the office assistant, and it is available when visiting patients at their homes,

* Read before the American Dental Society of Europe, March, 1910.

when their vitality is often low and they are in consequence especially liable to systemic disturbances.

The case should contain all the needed remedies including distilled water, all plainly labelled and dosage noted. The hypodermic syringe should be of the all-metallic kind lest the plunger be found dried and unserviceable when suddenly needed. The contents will doubtless vary somewhat according to individual needs. As I shall take mine with me on extended journeys I have included a list of poison antidotes and a jar of antiphlogistine, which I have found to cover a large range of the smaller injuries to which the genus "Homo" is liable. In case the dentist is in the habit of administering general anesthetics a pair of tongue forceps should certainly be included.

Some years ago after the administration of nitrous oxid gas to a young lady for the extraction of several teeth the patient was making good recovery when suddenly marked indications of asphyxia became apparent. Respiration stopped and the face became rapidly almost black. After reassuring myself that there was no tightness of the clothing, examination of the mouth revealed the fact that owing to an abnormally long frænum, the tongue had dropped back into the fauces which it completely blocked. Having no tongue forceps at hand I was obliged to resort to rather vigorous methods which are only to be recommended because of their effectiveness, viz: taking the patient from the chair and allowing the body to drop forward over my left arm, with my right I delivered a sharp blow with the fist between the shoulder blades. This quickly accomplished the desired result. The tongue was thrown forcibly forward and respiration was resumed.

To add, if possible, emphasis to what was suggested earlier in the paper I would say that during this operation my assistant, a man of more than ordinary resourcefulness, stood by looking like a marble statue and was exactly as useful to me in the handling of the patient.

Syncope.—Patient should be laid prone. Clothing loosened if necessary. Give plenty of fresh air and bathe face in cold water. Volatile salts may be inhaled. If recovery is slow, brandy or aromatic spirits of ammonia, in fl. dr. ss-ij doses, may be given internally as soon as deglutition is possible. There is little danger in simple fainting, but to distinguish between syncope and some phases of heart failure is not so easy, and it is fortunate for us that the treatment for both is along the same lines. Although in no way a sure criterion, the pulse is here our most valuable guide, for while in fainting it may be markedly lowered in force, it is usually fairly regular, but in heart failure whether from the toxic effect of cocaine or from other altered function, it is usually intermittent, erratic and often almost entirely disappears.

In view of the almost universal use of cocaine and the fact that owing to idiosyncrasies even its use topically sometimes brings about alarming symptoms, we should be especially prepared to meet conditions of—

Heart Failure.—As the prevailing symptom of both syncope and heart failure is brain anemia, the position and preliminary treatment should be the same. In addition remedies more or less directly affecting the heart are ordinarily used, as amyl nitrite, strychnin, nitroglycerin, digitalis, ether and camphor.

Nitrate of amyl is administered by inhalation in 3 to 5 minim doses. It is a forcible, quick heart stimulant, although but transient in its effect, and as soon as the primary effect of the drug has been realized, it should be immediately followed by the use of a general stimulant. I am inclined to the belief that strychnin 1-30 grain or nitroglycerin 1-100 grain, both administered hypodermically, are rather the favorite remedies in America, while where I am practising the following prescription is more generally employed:

℞

Ether	1.0
Camphor	2.0
Ol. Oliv.	8.0

in which the olive oil is only to act as a solvent for the camphor. This administered hypodermically in 10 minim doses. If fairly immediate results are not obtained from this, the dose may be repeated after a few moments.

Nitroglycerin is similar in its action to the nitrate of amyl, producing vascular dilatation and consequent lowered blood pressure. It is not quite so prompt in its action as the nitrate of amyl, but is rather more enduring in its effect.

Digitalis is also a vascular stimulant and seems to retard pulsation, at the same time increasing the force of the heart beat. It is exhibited hypodermically in 1-50 grain doses and is apparently especially demanded in case of intermittent heart action.

Failing anything else, resort must be had to artificial respiration, about twenty beats to the minute.

Swallowing of Foreign Bodies.—These cases as a rule do not come within the province of the dentist, but belong to the general surgeon. If the object swallowed is not larger than a tooth or crown and has no sharp points to lacerate the walls of the digestive tract, it will probably cause no complication after having reached the stomach. The patient

should have all the assurance you are justified in giving and allowed for some hours a diet consisting entirely of foods rich in starch, like bread, or better still, mashed potatoes. This assists in forming a bolus about the object, which permits of an easy passage through the intestines. Should the case be more serious inquire the name of the family physician and put yourself at once in communication with him.

Dislocation of the Interior Maxilla.—This is quite possible in an everyday practice, and while very simple and usually easily remedied, it is often extremely terrifying to the patient who is apt to associate the condition with tetanus. It may occur from inherent weakness of the muscles where they are kept on extreme tension for prolonged filling operations or in the taking of impressions. It is simple displacement of the condyloid process downward and forward until, in complete dislocation, it rests in front of the articular eminence.

In case the dislocation is bilateral it is advisable to reduce each side separately and this is usually readily accomplished by means of exerting strong force on the posterior teeth of the mandible, carrying it downward far enough to allow the process to pass the articular eminence and then backward until it drops to place.

If there is any "doubting Thomas" who questions the amount of force usually attributed to the muscles of mastication, let him attempt this operation without amply protecting his hands with a towel or napkin, but unless he has more thumbs than he needs, their use is earnestly recommended as the mandible drops into place with no inconsiderable force. In case the muscles are unusually tense, a cork or piece of wood may be used as a fulcrum by placing it between the molars on the affected side and then directing the force towards raising the anterior part of the maxilla. In extreme cases the use of a general anesthetic is required to induce relaxation of the muscles. After reduction a bandage should be worn for some hours.—*The Pacific Dental Gazette* (from *Dental Review*).

Harsh Criticism.—Some men in the profession, especially young men, are much given to harsh criticism of those who differ from them in their beliefs, habits or practice. They seem to think that the stronger and more vitriolic their invectives the more it makes the victim squirm and the more profound its impression upon the reader. This is not at all the case. Wisdom, logic, moderation and tolerance should always mark our criticism of others, and it will always prove the more convincing to well-balanced men.—*The Medical World,* April, 1910 (from *The Dental Brief*).

THE RELATION OF DENTISTRY TO PREGNANCY

By Jean Cline, D.D.S., Portland, Ore.

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As a dentist, I believe that countless women could be spared no small amount of pain during the 270 days beginning with conception and ending with the birth of the child, and not only do I believe this to be true, but I will go farther and state that I am firmly convinced that the nervous reflexes directly due to abnormal conditions are the causes of more premature births than the doctor or dentist have any knewledge of.

In my own limited practice it has been my misfortune to have been, unwittingly, the cause of four premature births, and mostly by reason of the fact that the patients had failed to acquaint me with their condition before submitting to the dental operations that they requested me to perform.

In one of the cases the simple operation of placing a porcelain crown on a previously devitalized incisor root was the cause of a premature birth. The patient, as I afterward learned, was in the third month of pregnancy. In two of the other cases I have mentioned the premature birth was directly due to extraction of teeth, and the fourth and last one of which I have definite knowledge was due to the nervous reflexes set in motion by a long series of dental operations, the prospective mother at that time being near the end of the third month of pregnancy.

However, it is not of these conditions that this paper is intended to treat, but of a few of the many dental ailments due either directly or indirectly to the state of pregnancy. And before proceeding further let me state (lest I be termed a plagiarist) that a majority of the succeeding facts are taken from a paper by Dr. J. E. Power, appearing in one of the journal issues of the American Medical Association.

The process of childbirth is a natural and physiological process, but natural as it may be, it is also true that conditions are daily produced which may change the natural conditions into unnatural ones; from a condition of health to one of disease, resulting in a majority of cases to nothing more than a great inconvenience to the patient; yet not infrequently it happens that the unnatural conditions thus brought about even go so far as to result in the cessation of all functions, followed by the death of the embryo or the mother or both.

* * * * * * * * * *

The alimentary canal must be kept in the best possible condition, for without nourishment there can be no life, or when an insufficient amount of nourishment is supplied the growing embryo is greatly handicapped in its struggle for existence. The various changes just mentioned in the vital organs are certain to disturb the physiological equilibrium of the individual to a more or less degree. The disturbances in the nervous system have a tendency to make the patient fretful and peevish, excitable or depressed. As the term of pregnancy advances idiosyncracies are often noted. The one most often present is generally an inexplicable craving for certain kinds of food. The patient, should she be depressed or despondent, nearly always exhibits in a marked degree a total disregard of all the hygienic laws that she previously observed with care, and it is this mental condition, combined with a lessened degree of vital resistance, that plays havoc with the dental organs.

During pregnancy the conditions that are the cause, to great extent, of all the dental disintegration, are most actively present. Holding the chemico-vital theory to be the correct explanation of tooth decay and that the mediums necessary to support the micro-organisms of dental or any other decay are heat, oxygen and the presence of moisture, it is easy to see how well these media are supplied, and in such a marked degree at this time.

These three elements are actively present in the mouth at this time more than at any other, and are supplied, the heat by the blood, the moisture by the saliva, and the oxygen by the air. So when the unclean, unresisting teeth of a woman made careless and slovenly by the nervous perversions of pregnancy are attacked by the micro-organisms of dental decay and bathed in a hyperacid saliva, it is easily seen that the dental caries is more likely to appear at this time than at any other. There is another condition favorable to decay that is of supreme moment: namely, the morning sickness, or vomiting of pregnancy. It has been claimed that the destructive disintegration of the dental structures can conclusively be traced to the periodic vomiting associated with this period of life. While in the main I believe this to be true, still I think there are other more important factors in the causation of tooth decay at this period. The vomiting of pregnancy occurring generally during the first three months, but not infrequently lasting throughout the full term, is supposed to be due to one of the three causes: namely, visceral displacement due to embryonic development; changes in the genital or digestive tract; or by a direct effect on the nervous system, superinduced by the displacement of the uterus, thereby causing irritation of the nerves governing the action of the digestive tract. This latter

hypothesis is, in the writer's judgment, the most plausible. The conditions found in the mouth will be the same whether the vomiting is caused by auto-toxic or uropathic influences. In order that the stomach may perform its natural functions, it is supplied with gastric juices that are normally of highly acid reaction, and any pathological condition, such as dyspepsia, ulcers, gastritis or intestinal stricture which might appear during pregnancy, has a tendency to increase the acidity of the secretions and the stomach's contents. So it will be seen that during the spasms of the vomiting of pregnancy and following them, the teeth will be coated, unless the greatest cleanliness is observed, with a mixture of partially digested food, saturated with a strong solution of hydrochloric acid. It would be superfluous to follow any further the resulting effects of such a condition on the dental organs.

The special reason for such troubles appearing at this time, the most trying of a woman's existence, is difficult to explain, yet they do occur. As dentists our interests in these cases are in the direction of combatting the probable results upon the dental organs. We should be in this respect educators as well as operators, and in view of the general apathy as well as ignorance prevailing among prospective mothers, I believe it to be our duty to point out to them the danger of neglecting their teeth at such a critical period.

Nature, it is true, generally prevents many of the more dangerous conditions previously mentioned, but some or all of the lesser troubles are invariably present, and it is to assist the natural tendency to surmount these difficulties that the help of the profession is needed. It is, I realize, a most delicate question to propound to a newly-married woman as to whether she is pregnant, and just the proper method of acquiring this knowledge is difficult to find, because every woman has her own individuality, and therefore the knowledge must be obtained from each in a manner calculated to embarrass her as slightly as possible. This knowledge, however, should be gained, and with a reasonable amount of tact on the part of the questioner can be gained with but little trouble. One should even go farther than that. It is my belief that to wait until the pregnant state occurs is to wait too long; the condition should be anticipated, and warning advice given to the patient.

In regard to establishing any special line of treatment during this time, I will simply state that authorities differ in regard to the best methods to pursue. There is but one upon which they all agree, namely, that of obtaining as nearly as possible a hygienic condition of the oral cavity. The character of the dental services that should be rendered to pregnant women is a much debated subject. In the case of a patient

who is not inclined to be nervous, one can work with almost as little fear of harm as in the case of a non-pregnant woman. But in the more nervous, or highly excitable women, great care should be exercised. Short sittings and temporary work should be the rule. No appointments should be made at the time corresponding to the regular menstrual period, for then it appears the greatest internal changes occur, and the patient is more liable to be in a delicate condition than at any other time.

Half of the operator's success depends on whether or not he gains the patient's confidence. Impress her with the fact that you are thoroughly familiar with all things pertaining to her condition and that under no circumstances will harm befall her.

As I have previously stated, the prime object of this paper was to bring the subject to your notice, but if in addition, it has served to arouse a sense of the responsibility of the dentist in cases such as the ones under consideration, I shall consider my humble efforts as eminently successful.—*The Dentists' Record* (from *American Dental Journal*).

A CONSIDERATION OF THE QUESTION OF SUSCEPTIBILITY AND IMMUNITY TO DENTAL CARIES *

By Edward C. Kirk, D.D.S., Sc.D., Philadelphia, Pa.

Many dentists pride themselves on being "practical." They are busy repairing the ravages of decay, relieving pain, etc. And they look with impatience on what they call "theory." They regard it as impracticable, as only suited to the dreamers, etc., in the profession. And they spend little time on it.

They forget that every operation they perform was held in theory only yesterday, that what they do is possible only because of the previous work of the theorists, and but for the work of the man who can theorize as well as do, dentistry would be only a trade, and a pretty stagnant one at that.

This magazine has no patience with idle mental rambles or with theorizing that is not seeking some valuable end. To such it has applied the purposely derogatory term "hot air." Would that it might be stricken from our meetings and publications.

But for theorizing such as follows in this article of Dr. Kirk's, The Digest asks respectful attention from even the most "practical" dentists. When they have read it, they will not know all about the subject of the origin of caries, but they should know more than before. Their technic with excavator or bur will not be any better. They cannot work any faster or get better fees. But they will be bigger men mentally and that is what the profession needs.

Let us build well for the present. But let us at the same time not neglect to lay the foundations for the bigger mental house of to-morrow and all the future.—Editor.

* Read before the First District Dental Society of the State of New York, February 8, 1910.

SUSCEPTIBILITY AND IMMUNITY AS RELATED TO AND VARYING WITH NUTRITIONAL STATUS

We have noted that dental caries is essentially a disease of childhood and youth; and when we come to study the question of food habit in youth and maturity respectively, we find, generally speaking, that the consumption of carbohydrates is relatively greater in youth than at maturity and thereafter. Childhood is the starch and sugar-eating period. Beginning at the weaning stage, the infant is fed upon paps of sweetened starch, fermentable infant foods, potato, biscuits, cakes, etc., with a relatively small proportion of proteid in the dietary. The candy-eating stage is reached as early as the convertibility of the penny into the product of the candy-shop is solved by the infant mind as an economic problem, and once established is rarely relinquished until years of so-called discretion have been attained. In the meantime, decay has done its devastating work in the denture. With early adult life, the tendency of the food habit is to change toward the proteid side, and with this change in food habit the arrest of carious action and ushering-in of the stage of immunity occurs. For several years I have made it a point to examine into the question of food habit in cases of both susceptibility and immunity to dental caries, and I have found a practically uniform and constant relation of these two conditions to the carbohydrate and the proteid food habit, respectively. Caries is rarely to be found in a state of active progress in the mouth of a meat-eater. I regard, then, the absence or insufficiency of carbohydrate material in the salivary composition as one of the important, if not most important, factors in immunity to dental caries—for lack of proper pabulum is fully as efficient as a prophylactic as is antisepsis or asepsis.

REACTION OF THE ORAL FLUIDS

Another potent factor in its bearing upon the problem of susceptibility and immunity to caries is the reaction of the oral fluids. In the present state of our knowledge it is difficult to say with certainty what is the normal reaction of the mixed oral fluids, especially if, by the term normal, we imply an ideal standard of health with all of the nutritive processes in perfect equilibrium. The mixed saliva is the combined product secreted by several pairs of special salivary glands which pour their secretion into the buccal cavity; in addition to this it contains the mucoid secretion of a multitude of mucous glands embedded at various points beneath the mucous membrane of the mouth. While a neutral or slightly alkaline reaction may be taken as normal to a healthy saliva, it is certain that where the saliva is mucoid in character,

is viscid because it holds much mucin in solution, such a saliva is always alkaline in reaction, for the reason that mucin is precipitated by acids and by acid salts, consequently an acid saliva within certain limits is free of mucin, limpid, and of thin consistence. My own observation of many cases as they are examined at our college clinic leads me to the conclusion that the most active expression of caries is to be found in mouths having an alkaline and highly mucoid saliva, and that such saliva is characteristic of the starch and sugar-eater. We rarely find active caries in mouths having a thin, limpid saliva of acid reaction, which is more characteristic of the arthritic—the individual whose oxidation processes are inferior to normal, and who does not burn up his proteids to their normal end-products.

The importance of the salivary reaction is twofold with reference to carious susceptibility or immunity; first, in relation to the vital conditions of bacterial growth, and second, in relation to the localization of the decay process. With regard to the first point, various observers agree that lactic fermentation proceeds best in a neutral medium, and Miller's direct investigation of that point demonstrated the fact that when the accumulated lactic acid reached 0.75 per cent. the fermentation process was promptly arrested by the death of the bacterial organism in its own waste product; hence the necessity for some neutralizing agent in the surrounding medium if the fermentation process is to be kept continuously active. In the carious process it has been taken for granted that the calcium salts of the surrounding tooth structure neutralize the lactic acid as it is excreted by the bacterial ferment. I question the validity of this view, for the reason that I am not able to understand how tri-calcium phosphate can neutralize lactic acid without creating an acid end-product, and for the still further reason that when I have added coarsely powdered tooth structure in excess to a one per cent. solution of lactic acid it has remained continuously acid for over two months and until an accidental mould infection brought about decomposition of the specimen. Neutralization or removal of the lactic acid of caries is, I am inclined to believe, brought about by carbonates in the saliva or by its simple solvent or washing effect, by which the acid of the caries is carried away as such by the surrounding medium.

The sources of oral acidity are two. First, acidity resulting from fermentative action in the buccal cavity; second, that due to the formation of acid salts the result of faulty nutritional processes. These latter are distilled out from the blood through the oral mucous glands, and thus find their way into the mixed saliva. When the acidity from either cause reaches a certain maximum the mucin is precipitated and

the saliva loses its ropy character, becoming thin and limpid, or the excretion of mucin may be arrested in the mucous glands, in which instance we have a limpid, often neutral or amphoteric saliva, with an acid reaction of various localized areas over the buccal mucous membrane. When these areas of acidity occur in various parts of the buccal mucous membrane, we have, I believe, a precipitation of the mucin of the mucus at those points, and in that fact we may find an explanation of certain types of irritation of the buccal mucous membrane that are characterized by catarrhal conditions, particularly in the nasopharynx, associated with deposits of adherent thickened excretion which is really mucin precipitated by the acid salts excreted in these localized areas of the membrane. The mucous membrane becomes irritated not only by the mucin precipitated in the glands embedded in its texture, but by the constant coughing and hawking occasioned by the effort to dislodge it. In the same way we may account for the hypertrophied condition of the buccal mucous glands so frequently observed in the texture of the labial mucous membrane in those individuals suffering from chemical erosion of the front teeth.

(*To be continued.*)

SCHOOL DENTISTRY IN GERMANY

We quote the following article from the *Morning Post:*

"The Education Officer of the London County Council has prepared, for the use of his committee, a report on school dentistry in Germany based on a personal investigation made during the Whitsuntide recess. He says that the school dental clinic in Germany is a product of the school hygiene movement, whose origin and progress are in turn a derivative of the general national development in Germany for the last quarter of a century. Large sums of money are being raised and expended by the State and town authorities, as well as by voluntary societies, to combat every form of general disease or ailment, and especially tuberculosis. The Germans are busy in developing a virile race, and in his judgment they are succeeding. The movement for the care of the teeth began comparatively late. The experience gained from the inspection of the teeth of army recruits (in the case of soldiers of good health 92 per cent. were found to have bad teeth), and from other sources of information, such as the medical inspection of children, have gradually educated local authorities to the view that the care of the

teeth, to be of real value and to be economically done, must be begun in the school. It is held that the nutrition of children is so seriously interfered with by bad teeth that not only their bodily but their mental development suffers. Mr. Blair continues:

" ' On the average children who have good teeth, and are, therefore, better nourished, have better reports on their work than other children, although in some cases the former have not so much capability as the latter. Most people know that stomach troubles, which are often the result of bad teeth, cause mental depression and dull the desire and capability for work as scarcely any other illness does. Less known than the ordinary illnesses arising from bad teeth is the great danger which decayed teeth cause by harboring germs of all kinds; for these find a favorable ground for development in hollow teeth. All infectious illnesses, especially tuberculosis, find the best means of spreading through bad teeth.'

THE QUESTION OF COST

" He goes on to say that as regards the necessity of erecting school clinics there is no difference of opinion; the only question anywhere is that of cost, which varies so much that it is not possible for him to give approximate estimate. He does, however, submit tables showing the facts in regard to the dental clinics already established, both as to cost and sources of income. At the top of the tables are those institutions which give free treatment to all elementary school children. These clinics are regarded in Germany as the ideal; for German experience has shown that it is very difficult to discriminate between those able and those unable to pay. Some clinics have given up free treatment and only do extractions and give advice free, while charging a small sum for fillings, while only in very poor cases is free treatment given. It has already been shown that parents of small means pay up money for treatment very grudgingly. Instead of paying a lump sum, it was proposed that instalments should be paid; for instance, 1 mark a year, which would grant free treatment. This system is equivalent to insurance and preferable to paying a lump sum, and through it the Insurance Association, especially the existing family insurance association, can have the children permanently treated. Hamburg, which already has a dental clinic, is contemplating a working arrangement between the insurance association and the schools. Some school clinics, established by voluntary societies, are granted by the town free rooms and sometimes a sum of money in aid—the rest of the cost being defrayed by voluntary subscriptions. This is regarded only as a temporary arrangement. It is held that the care of the teeth can best be done by the organization of

town clinics. Apart from the fact that the town has certain duties in connection with the health of the people, the town dental clinic offers the best solution of this question. The town officials can make their influence of some value in connection with the clinic, and they can avoid unnecessary interruption of the work of the school. If the treatment of children is handed over to private doctors, the latter will not lose sight of their own patients, so that interference with the work of the school cannot be entirely avoided. Further, it is to be remembered that in the case of a town clinic, which is also inspected by the town school officials, the interest of the teaching staff in dental hygiene is a much more real interest. There is another point of connection between the town clinic and the school. The dentist will have a share of school authority, and that is of great importance, for as children are accustomed to submit to the organization and working of the school, they will submit to the system of the clinic more readily, and its work will be impressed upon them during the whole of their school life and afterwards.

"Mr. Blair concludes by giving detailed descriptions of some of the clinics he has seen."—*British Journal of Dental Science* (from *Dental Practice*).

THE PARADOX OF WEAKNESS

One dismal afternoon a bank president was surprised by a knock at the door of his private office. A young assistant cashier came in, whose people and belongings the president knew. The young fellow's face was pale, and his whole look was harassed and anxious. After a moment of nervous silence, he blurted out: "I—I'm beginning to be afraid of myself. The change is tremendous, from that small country bank, where things are *so* different. The responsibilities are too great, the opportunities to go astray are—are—greater still! I don't know what has got into me, but it's like a temptation at my elbow to—to—go wrong, to try, just to see how easy it would be. And—I'm telling you." The president had wheeled round upon him, and was regarding him steadily. "You're leading your life too wholly and persistently along one line," he said quietly. "I'm neither afraid of you nor for you. Your mind and thoughts are too closely concentrated upon your work, and they need to be diffused over a wider area of interests in order to enable them to work well, and with ease to yourself, at just this particular juncture. But you must let me help you out. Report to me every evening, no matter how late. That will give you poise, and tide you over the day, so that you need take but one day at a time, and

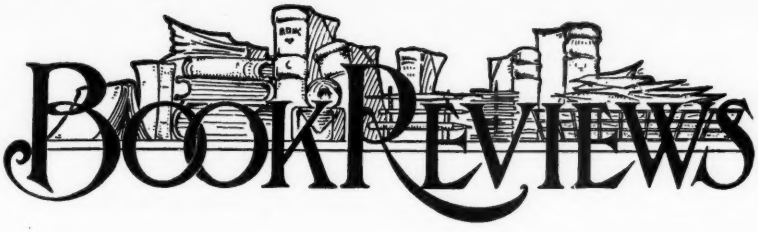
not keep looking into a far and fearful future. And—I'm going to enter you at the Country Club—that's to be between you and me—and I want you to use it. You're getting yourself on your mind."

Wasn't he wise, this president, thus at a moment to recognize the paradox of weakness, the weakness that felt itself tempted, the strength that perceived the temptation, and openly admitted it to self and another? And was he not doubly wise thus to turn it to account? He knew there was fine material in that young man, capacity and ability both; but he needed peculiar help at just this time of his life and work. That president's charities were many, his public spirit was unquestioned, and such opportunities for good as came in his way he seemed amply to fulfil. But he also knew that to stand face to face with a soul, and aid it at its most need, is a rare privilege, and he was making that privilege good. And he took no high ground. He did not, seemingly, admit the full significance of the moment. He did not further shake the young man's will by implying that there was a great moral strain; no, he dwelt, rather, upon a painted cloth of physical and mental monotony, in order to give the young fellow time to regain breath and grip and courage. Yes, it's a great thing to be able to use, both for ourselves and for others, the strength of our weakness, and the weakness of our strength.—*Harper's Weekly.*

TREATMENT OF ROOT CANALS

By A. D. Kyner, Moweagua, Ill.

Pulps in the distal roots of lower and lingual roots of upper molars can usually be removed and the canals reasonably well filled. By the use of finger drills and sulphuric acid the minute canals in the mesial roots of lower and buccal roots of upper molars are opened as far as possible, acid in the canals neutralized and roots dried, dry cotton wicks packed in the canals, and over these a wad of cotton saturated with a 5 or 10 per cent. solution of formalin is placed to remain three or four days. The cotton wicks will draw the formalin to the point where you want its effect. It will do its work and disappear and the tissues will not be subjected to the prolonged effect of the gas with detrimental results. The cotton wicks are removed and replaced with dry asbestos fibre—sterilized by passing through alcohol or gas flame—and over this a sterilized asbestos disk soaked with a saturated solution of thymol in ol. cinnamon, covering same with tin foil and then cement, completing the filling with any material you prefer.—*Dental Review.*



ANATOMY, DESCRIPTIVE AND APPLIED. By HENRY GRAY, F.R.S., late lecturer on Anatomy at St. George's Hospital, London. New (18th) edition, thoroughly revised, by EDWARD ANTHONY SPITZKA, M.D., Professor of Anatomy in the Jefferson Medical College of Philadelphia. Imperial octavo, 1496 pages, with 1208 large and elaborate engravings. Price, with illustrations in colors, cloth $6.00, *net;* leather $7.00 *net.* Lea & Febiger, Publishers, Philadelphia and New York, 1910.

We are in receipt of the new edition of Gray's Anatomy. Eighteen editions have been demanded in the course of its life of half a century, and they have enlisted many of the ablest anatomists of the present time. Since the death of the author, fifty years ago, the different editions that have been made have closely followed the principles upon which Henry Gray built his book. This last edition has been thoroughly revised. By rearrangement, many duplications have been thrown out and the space thus gained has been filled with new information.

Gray's book was the first to contain illustrations in colors. All these illustrations have been revised, many cuts replaced and additions made.

The editor, Dr. E. A. Spitzka, is Professor of Anatomy in the Jefferson Medical College of Philadelphia, and one of the world's foremost anatomists. He is able to present matter in the most lucid manner. He is an artist and the drawings from his hand convey accurate knowledge clearly to the mind and eye.

The chapter on "The Mouth, Oral or Buccal Cavity" will be of most interest to the dental profession, but there is very much in the book that will be exceedingly instructive and of great interest to anyone.

We are pleased to have such a valuable work on our library shelves.

You cannot neglect your duty and have the community fail to neglect you.—W. A. EVANS, M.D., Chicago.

SOCIETY AND OTHER NOTES

Officers of Societies are invited to make announcements here of meetings and other events of interest.

ARIZONA.

The Second Annual Meeting of the Arizona Dental Society will be held in Phœnix, November 10th, 11th and 12th, 1910.—W. H. Braxtan, D.D.S., *Secretary.*

CALIFORNIA.

The Sacramento County Dental Society meets on the second Monday of each month.—W. H. Renwick, D.D.S., *Secretary.*

The Tri-County Dental Society meets at Redlands, December 10th, 1910.—A. C. Tucker, D.D.S., *Secretary,* San Bernardino, California.

CONNECTICUT.

The Dental Commissioners of the State of Connecticut hereby give notice that they will meet at Hartford, November 16th, 17th and 18th, to examine applicants for license to practise dentistry.

GEORGIA.

The Atlanta Society of Dental Surgery meets the third Friday of each month at the Carnegie Library, Atlanta, Ga., at 8 P. M.—J. K. Barrett, D.D.S., *Secretary.*

ILLINOIS.—*Chicago.*

The Englewood Dental Society of Chicago meets November 8th, 1910, at Forbes Hall, 316 W. 63rd St.—W. J. Baumgartner, D.D.S., *Secretary.*

Chicago Odontographic Society meets the third Tuesday of each month in the Chicago Public Library Building.—T. L. Grisamore, D.D.S., *Secretary.*

The Knox County Dental Society meets November 17th, 1910, at Galesburg.—J. D. Caheen, D.D.S., *Secretary.*

The Eastern Illinois Dental Society meets at Kansas, Illinois, on November 1 and 2, 1910.—T. A. Fulton, D.D.S., Charleston, Ill., *Secretary.*

The Will-Grundy County Dental Society meets the second Tuesday of November, 1910, at Joliet.—J. P. Leonard, D.D.S., *Secretary.*

The Sangamo-Menard County Dental Society meets in Springfield November 14th, 1910.—Albert E. Converse, D.D.S., *Secretary.*

The next meeting of the Champaign-Danville District Dental Society will take place in Urbana, November 8th, 1910.—Robert Wallace, D.D.S., *Secretary.*

The McLean County Dental Society meets the first Monday in November in Bloomington.—H. G. McCormick, D.D.S., Normal, Ill., *Secretary.*

IOWA.

The Sioux City District Dental Society meets November 10, 1910, at Sioux City.—H. P. White, D.D.S., *Secretary.*

The Iowa State Board of Dental Examiners will hold a meeting for the examination of candidates for license to practise dentistry in Iowa, December 5, 1910, in Des Moines.—E. D. Brower, D.D.S., LeMars, Iowa, *Secretary.*

The Waterloo District Dental Society holds its annual meeting November 8, 1910.—C. N. Shane, D.D.S., *Secretary.*

KANSAS.

The Kansas City Dental Society meets the second Friday of each month.—M. Dewey, D.D.S., 1016 Armour Blvd., *Secretary.*

MICHIGAN.

The regular meeting of the Michigan State Board of Dental Examiners will be held at Ann Arbor, November 16 and 19, 1910.—A. W. Haidle, D.D.S., Negaunee, Mich., *Secretary.*

MINNESOTA.

The next regular meeting of the Minnesota State Board of Dental Examiners will be held at the Dental Department of the State University in Minneapolis, November 15, 16 and 17, 1910.—George S. Todd, D.D.S., Lake City, *Secretary.*

MISSOURI.

The St. Louis Dental Society meets the first Tuesday of each month (unless otherwise announced) at 8 P. M., in the Auditorium of the St. Louis Medical Society.—G. B. Winter, D.D.S., *Secretary.*

NEBRASKA.

The Omaha Odontological Society meets every third Thursday in the month excepting June, July and August.—W. H. Sherraden, D.D.S., *Secretary.*

OHIO.

The Forty-fifth Annual Meeting of the Ohio State Dental Society will be held in Columbus on December 6, 7 and 8, 1910.—F. R. Chapman, *Secretary.*

TEXAS.

The Houston Dental Society Meetings are held on the third Monday evening of each month at the Houston Business League Rooms.—Thomas W. Dee, *Secretary.*

WASHINGTON.

The Spokane Dental Society meets the first Thursday after the second of each month.—Robert Carratte, D.D.S., *Secretary.*

The Kings County Dental Society meets the first Tuesday in every month at 1032 Henry Bldg., Seattle, Wash.

THE G. V. BLACK DENTAL CLUB CLINIC

The G. V. Black Dental Club of St. Paul will hold a Midwinter Clinic in February, 1911. It is our intention to make this meeting the most interesting and profitable of all which we have held.

A cordial invitation is extended to the members of the profession to attend and assist us in making this meeting the best that has ever been held in the Northwest. For further information, address R. B. Wilson, *Secretary,* Am. Nat. Bank Bldg., St. Paul, Minn.

BANQUET TENDERED DR. L. D. ARCHINARD.

In appreciation of the many years of valuable services to the Dental Profession, the Odontological Society of New Orleans tendered Dr. L. D. Archinard a surprise banquet at the West End Hotel on August 24, 1910.

Dr. Archinard is ex-president of the Louisiana State Dental Society; ex-president 1st and 2nd Districts Dental Society, Founder of the Odontological Society, organizer of and Professor of the New Orleans College of Dentistry, Dental Department Tulane University.

One of the features of the evening, which came as a surprise within a surprise, was the presentation of a handsome solid silver loving cup as a memento of the occasion.

Dr. A. G. Friedrichs acted as Toastmaster.

SMILES AND FROWNS

(*With apologies to* Ella Wheeler Wilcox)

Smile and the world smiles with you,
"Knock," and you go alone;
For the cheerful grin will let you in
Where the kicker is never known;
Growl, and the way looks dreary,
Laugh and the way looks bright;
For a welcome smile brings sunshine, while
A frown shuts out the light.

Sigh, and you attain to nothing,
Work, and the prize is won;
For the nervy man with backbone can
By nothing be outdone:
Hustle, and fortune awaits you,
Shirk, and defeat is sure,
For there's no chance of deliverance
To the chap who can't endure.

Sing, and the world's harmonious,
Grumble, and things go wrong;
And all the time you are out of rhyme
With the busy, bustling throng:
Kick, and there's trouble brewing,
Whistle, and life is gay;
And the world's in tune like a day in June,
And the clouds all melt away.